Academic Program Review

Self-Study

Department of Economics University of San Francisco

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I. MISSION AND HISTORY

A. Mission

Founded in 1855, the University of San Francisco has declared its commitment to the highest standards of learning in the American, Catholic, Jesuit tradition. Central to its mission of preparing leaders in service, the University seeks to offer quality education. It fosters close student-teacher relationships with a special concern for the holistic development of the student - intellectual, spiritual, moral, social, psychological, and physical. The University seeks to promote high standards of academic excellence to prepare leaders with not only the character that seeks to affect positive change, especially for the most needy, but the academic training necessary for recognizing and implementing effective action and policy.

Economics has developed a rigorous set of analytical and empirical tools for understanding human behavior as it plays out in everyday life, business, politics, and international issues. Our discipline has devoted itself to understanding how to better use society's scarce resources, how technology and markets have improved our standard of living, why unemployment, inequality, and poverty can exist in the midst of plenty, and many other pressing questions related to both domestic and international issues.

The Economics Department at the University of San Francisco offers undergraduate and graduate programs that train our students in the analytical framework of economics to help our students engage a wide array of micro and macroeconomic issues. Our department's perspective is international and reflects the background of our faculty, and our core strengths lie in the areas of international and development economics. Our undergraduate program provides students with the ability to focus their studies in international economics, development economics, and financial economics. We also have two outstanding masters programs: a Masters of Arts in Economics and a Masters of Science in International and Development Economics, with curricula structured to produce students with excellent empirical and analytical skills along with the ability to apply them to practical problems. With a particular focus on international issues of globalization and poverty, the mission of our department is to equip undergraduate and graduate students with the character and rigorous intellectual foundation in economics to help our students foster a more just and humane world and to carry out a research agenda that contributes at the highest levels to micro and macroeconomic issues related to poverty, economic growth, and globalization.

In carrying out this mission our faculty seeks to embody core Jesuit values of perseverance, cooperation, communication, and concern for the welfare of one another and the common good. We have day-long retreats at least once a year to talk through issues out and arrive at a consensus on the directions the department should take. We are a department where everyone's opinion is solicited, listened to, and valued. We have faculty who are excited about their research, their teaching, and their academic programs. The results have been significant growth in the quantity and quality of our academic publications, growth in the number of undergraduate and graduate students, and economics programs that are relevant, attract the

interests of students, and fulfill the University's mission to train graduates to help address critical world issues.

B. History

Since the last Academic Program Review in 2007, the Economics Department has undergone significant changes with respect to staffing, programs, and curriculum.

With respect to faculty changes, two senior, tenured professors (Hartmut Fischer and Tetteh Kofi) have retired, and one Full Professor (John Veitch) has become the Associate Dean of Graduate Programs in the USF School of Management. At the junior faculty level, two tenure track Assistant Professors left USF for positions in other academic institutions (Jennifer Alix-Garcia to the University of Wisconsin and Pauline Grosjean to the University of New South Wales), and a third (Purba Mukerji) was not rehired after her Third Year Review (she is now on the faculty of the University of Connecticut). In 2012, three new tenure-track Assistant Professors joined the Department: Jesse Antilla-Hughes, Suparna Chakraborty, and Yaniv Stopnitzky.

With regard to programs, the major change in the Department has been the relocation of the MS in Financial Analysis to the School of Management. This University-level decision has represented a loss of what had been the largest graduate program in the Department, as well as the reassignment of the former MSFA Director and Economics Department Chair (John Veitch) to the School of Management, along with one of the full time Term faculty lines (John Gonzales). The other major recent programmatic change is the conversion of the Master of Arts Program in International and Development Economics (MA-IDEC) to a Master of Science degree (MS-IDEC), reflecting the program's emphasis on quantitative methods training and original empirical research. The Department is also currently seeking approval of a Bachelor of Science degree, which would be offered in addition to the BA degree for undergraduate students.

In terms of curriculum, the Department has introduced revisions to both the undergraduate and International and Development Economics graduate programs. These are detailed elsewhere in the report; the most important changes are the introduction of a capstone requirement for undergraduates, and a third semester of Econometrics for MS-IDEC students.

The Economics Department is located within the College of Arts and Sciences, and comes under the administrative authority of the Associate Dean for Social Sciences. The Chair represents the Department on both the Arts Council and the College Council. Two faculty members also hold seats on the Faculty Advisory Committee of the International Studies Program, in which major the Economics Department teaches two of the required courses (Global Economy and Research Methods).

The Economics Department regularly offers 8 courses (11-15 sections per semester) in the Core Curriculum: ECON 101 (Principles of Microeconomics – 3-units), ECON 102 (Principles of

Macroeconomics – 3-units), ECON 111(Principles of Microeconomics – 4-units), ECON 112 (Principles of Macroeconomics – 4-units), ECON 280 (Global Economy), ECON 300 (Economic History of the United States), ECON 306 (Economies of Modern Europe), and ECON 372 (Economic Development). All of these courses, with the exception of ECON 372, which fulfills the Cultural Diversity requirement, fulfill the Core E (Social Sciences) requirement. See Table 1 below.

| Count of CRN | l | ACADEMIC PERIOD | - | - | - | |
|--|----------------|--------------------|--------|--------|--------|----------------|
| ATTR | COURSE ID | 201220 | 201240 | 201320 | 201340 | Grand Total |
| CD_Core CD Cultural Diversity | ECON372 | | 1 | | 1 | 3 |
| CD_Core CD Cultural Diversity Total | | | 1 | | 1 | 3 |
| C-E_Core E Social Sciences | ECON101 | 2 | 2 | 2 | 3 | 12 |
| | ECON102 | 2 | 2 | 3 | 3 | 12 |
| | ECON111 | 3 | 2 | 4 | 2 | 14 |
| | ECON112 | 3 | 3 | 3 | 3 | 14 |
| | ECON280 | 1 | 2 | 2 | 2 | 9 |
| | ECON300 | | | | 1 | 1 |
| C-E_Core E So Total | ocial Sciences | 11 | 11 | 14 | 14 | 62 |
| Grand Total | | 11 | 12 | 14 | 15 | 65 |

Table 1Economics Courses in the Core Curriculum, 2012-2013

The Department heavily services both the International Studies (BAIS) major and undergraduate majors in the School of Management. Economics faculty teach two of the four required courses (2-3 sections per semester) for all BAIS students; these are ECON 280/BAIS 103 (Global Economy) and ECON 220/BAIS 201 (Research Methods for International Studies). Thus, teaching in the BAIS program comprises the equivalent of one full-time faculty's annual typical teaching load. BAIS students choosing the International Economics (IE) "functional track" within the major take an additional four courses in the Economics Department. Table 2 and Figure 1 provide recent data on the growth of the IE concentration within BAIS. As of Spring 2014, 28 students (representing 17% of all BAIS declared majors) were enrolled in the IE track.

 Table 2

 BAIS International Economics concentration growth since 06F (program data)

| BAIS Sem | Year | <u>IEC</u> | <u>% declared</u> | <u>% overall</u> |
|----------|------|------------|-------------------|------------------|
| 5 | 06F | 9 | 16.07% | 6.72% |
| 6 | 07S | 16 | 12.60% | 9.76% |
| 7 | 07F | 14 | 10.37% | 6.51% |
| 8 | 085 | 15 | 8.57% | 7.46% |
| 9 | 08F | 15 | 8.77% | 6.22% |
| 10 | 09S | 20 | 11.17% | 9.13% |
| 11 | 09F | 19 | 11.95% | 7.57% |
| 12 | 10S | 25 | 12.08% | 9.43% |
| 13 | 10F | 18 | 10.23% | 7.44% |
| 14 | 115 | 15 | 8.52% | 6.61% |
| 15 | 11F | 20 | 12.42% | 8.16% |
| 16 | 12S | 21 | 10.61% | 8.79% |
| 17 | 12F | 22 | 12.36% | 9.21% |
| 18 | 135 | 23 | 12.50% | 9.96% |
| 19 | 13F | 24 | 16.22% | 11.32% |
| 20 | 14S | 28 | 17.18% | 13.86% |

Figure 1



With respect to servicing School of Management students, the Economics Department designates an average of 6 large (65 student enrollment cap) sections of Principles classes per semester especially for undergraduate SOM students, who are required to take these classes for their majors. In addition, a significant number of SOM majors choose to minor in Economics, and enroll in our upper division courses as well. Table 3 reports the percentage of student credit hours (SCHs) in Economics courses taken by BAIS and SOM students, respectively, from Fall 2012 – Spring 2014. As the table indicates, over 60% of all Economics SCHs are accounted for by SOM students, and an additional 10% by students majoring in International Studies.

Table 3Percent Undergraduate Student Credit Hours in Economics Dept. courses taken by BAIS and
SOM majors

| | Fall 2012 | Spring 2013 | Fall 2013 | Spring 2014 |
|------|--------------|----------------|--------------|----------------|
| BAIS | 7.68% | 9.78% | 11.71% | 9.61% |
| SOM | 61.35% | 63.44% | 62.10% | 62.99% |

The External Reviewers' Report from 2007 made the following recommendations:

1: Hire a new professor who would become director of undergraduate economics education, and who would be the internal advocate for undergraduate education;

2: Establish a required senior seminar that builds on (and requires) lower-level courses and which includes a substantial integrative writing component;

3: Set up a careful and monitored advising system for undergraduate students;

4: Establish a set of events and institutions that are designed to create more cohesion among undergraduate students;

5: Create a departmental governance structure for the graduate programs;

6: Determine goals of the program for students, and modify the admissions, and coursework of the graduate programs to fit those goals;

7: Give faculty credit for thesis advising consistent with a 2-2 load for those faculty heavily involved in thesis advising;

8: Give at least two additional lines to the economics department;

9: Improve physical facilities;

10: Establish better lines of communication with the School of Business and Management;

11: Improve communication with students, alumni and potential employers.

On the basis of those recommendations, the Department has made the following changes:

- Assigned leadership of the undergraduate program to a faculty member other than the Chair. This position is currently held by Professor Sunny Wong, who assumes responsibility for representing the Department at all Admissions and Orientation events, as well as intake advising for all new and transfer students.
- Established a capstone course requirement for all undergraduate majors. Students in the Finance concentration are required to take Economics 425 (Econometrics of Financial Markets); those in the Development concentration take Economics 473 (Development Microeconomics); and students in the International Economics concentration take Economics 479 (Advanced Topics in International Economics). All capstone courses substantively build on material and skills from lower-level courses and include an integrative writing component.
- 3. Established an undergraduate advising system led by Prof. Wong, and staffed by two additional faculty members (Profs. Jonas and Chakraborty).
- 4. Taken a number of initiatives to improve community-building among undergraduates, including social activities at the New Student Orientation and opportunities for undergraduate students to participate in the Department seminar series. The Department Program Assistant, Catrina Hayes, has taken a leadership role in organizing these activities and maintaining email and Facebook communication with the undergraduate community.
- 5. Introduced modifications into the graduate program goals, admissions criteria, and curriculum to address learning outcomes and career preparedness. These are addressed in detail in Section D below; they include splitting the previously combined sections of the core classes (Math, Micro, Macro, and Econometrics) into separate sections for MA-ECON and IDEC students, respectively; modifying the coursework sequence in the IDEC program; and requiring an additional semester of Advanced Applied Econometrics for IDEC students.

- 6. Relocated from University Center to Cowell Hall, with significantly improved faculty and staff office space. (The Department still lacks a common meeting space and dedicated computer facilities.)
- 7. Established ongoing relationships with colleagues in the School of Management, as well as in the Math Department.
- 8. Taken various initiatives to do alumni outreach and career preparation and placement. The Assistant Director of Economics Graduate Programs, Barbara Pena, has organized numerous networking events (detailed below in Box 1).

Box 1 Alumni Outreach

In Feb 2013, the Department of Economics held its first graduate alumni event. The event was very well attended with 30+ alums in attendance and over a 100 people in the audience consisting of prospective students, current students, alums, faculty, and staff. Each of the fourteen alum panelists spoke about how the skills they learned in their respective programs now related to the positions they held as well as offered advice to current students regarding the job market and job searches. An alumni reception followed the panel event. On the heels of this very successful alumni event—and due to the many enthusiastic requests from alums to have another alumni event sooner rather than later-- we held the next event in Sept. 2013. Though the format was similar to the first alumni event, the event in September also had a more interactive theme of "Networking and Connections" where participants where led as a group through various ice breakers and networking games.

It is of key importance for the Department to be able to continue to host alumni events at least every other year but, unfortunately, there has never been any line item provided in the budget that covers this type of activity. Therefore, we were only able to hold these two events last year due a gift account generously funded by one of our long-time faculty members. Compared to the many short and long term benefits that come from alumni events, the cost of \$2,500 per event is a relatively small amount. It would be quite timely if this budget matter could be visited by the Administration.

In addition to the two alumni events we have held so far, we regularly keep in touch with alumni with a yearly online newsletter as well as having developed a mentor program where exiting graduates volunteer to act as a mentor to any current or prospective students that would like to contact them via email to ask questions. We have also established our own internal alumni database as well as established a regular schedule of broadcasts throughout the year to stay in touch with alumni; i.e., special guest speakers, thesis defense, etc.

C. Learning Goals and Outcomes

The Department has developed the following sets of program goals and learning outcomes for each of the three programs within the Department (undergraduate, MA-ECON, and MS-IDEC).

| Progra | am Goals | Assoc | iated Learning Outcomes |
|--------|--------------|----------|--|
| 1. | Understand | econom | nic terminology and the fundamental theoretical approaches of the |
| | discipline. | | |
| | · | i. | Define the role of benefits and costs in the allocation of scarce economic |
| | | | resources. |
| | | ii. | Describe the interaction of demand and supply in a market for an |
| | | | economic good or service. |
| | | iii. | Define the nature of aggregate economic relationships between major |
| | | | macroeconomic variables and decision-makers. |
| | | iv. | Describe a regression model of an economic theory and estimate the |
| | | | model using actual economic data. |
| 2. | Employ econ | omic re | easoning and theory to analyze the structure of economic events and |
| | problems. | | |
| | | i. | Analyze the impact of an external event on the market for an economic |
| | | | good or service in both the short run and the long run. |
| | | ii. | Discuss the impact of the competitive structure of an industry on |
| | | | important market variables in both the short run and long run. |
| | | iii. | Analyze the impact of an external event on the aggregate economy in the |
| | | | short run and long run. |
| | | iv. | Use a simple algebraic economic model to formulate and investigate an |
| | | | economic problem. |
| | | v. | Use a graphical economic model to formulate and investigate an |
| | | | economic problem. |
| | | vi. | Use an estimated economic model to test an economic theory. |
| 3. | Employ econ | omic re | easoning and theory to analyze important government policy responses |
| | and their im | pacts or | n the economy. |
| | | i. | Analyze the impact of a government tax on the outcomes of a market for |
| | | | an economic good or service. |
| | | ii. | Discuss the problems that can arise as a result of an industry's |
| | | | competitive structure and how a government may respond. |
| | | iii. | Analyze the impacts of government fiscal and monetary on the aggregate |
| | | | economy in the both the short run and long run. |
| | | iv. | Apply economic analysis to problems that arise in other areas of |
| | | | economics and possible government policy options to these problems. |

Undergraduate Economics Program Goals and Learning Outcomes

MA in Economics Program Goals and Learning Outcomes

| Program Goals | Associated Learning Outcomes |
|-------------------|---|
| 1. Acquire knowl | edge of modern microeconomic theories and their applications to contemporary |
| economic pro | blems. |
| | i. Analyze the impact of government policies on the welfare of the households |
| | using indifference curve analysis. |
| | ii. Acquire knowledge of the theory of decision making under uncertainty and |
| | apply it to economic problem. |
| | iii. Acquire knowledge of the role of information in economic analysis. |
| | iii. Acquire knowledge of the theory of firms. |
| | iv. Acquire knowledge of different market structures such as perfect competitive |
| | market, monopoly, monopsony, monopolistic competition, duopoly and |
| | oligopoly. |
| | v. Acquire knowledge of basic game theory and its application in microeconomics. |
| | vi. Acquire knowledge of general equilibrium theory and the relationship between |
| | competitive equilibrium and Pareto optimality. |
| 2. Acquire knowl | edge of modern macroeconomic theories and methods of formal macroeconomic |
| analysis. | |
| | i. Acquire knowledge of the Solow growth model, the AK endogenous growth |
| | theory and R&D-based growth theory. |
| | ii. Acquire knowledge of the basic model of business cycle fluctuations and policy |
| | applications. |
| | iii. Acquire knowledge of theory of investment and asset pricing, theory of |
| | consumption, Keynesian theory of aggregate demand, IS-LM model, theory of |
| | Philips curve, rational expectations hypothesis and stabilization monetary |
| | policy. |
| 3. Acquire the ne | cessary mathematics needed in graduate study in economics. |
| | i. Solve unconstrained and constrained optimization problems and apply the |
| | techniques in economics problems. |
| | ii. Use the Kuhn-Tucker Theory to solve optimization problems with inequality |
| | constraints and apply the techniques in economics problems. |
| | iii. Acquire knowledge of the properties of concave function, convex function, |
| | homogeneous function and homothetic function. |
| | iv. Solve comparative statics problem. |
| | v. Solve first order differential equations and apply the techniques to economics |
| | problems. |
| 4. Conduct origin | al quantitative empirical analysis of a relevant economic problem. |
| | i. Express economic theory in terms of an observable model. |
| | ii. Formulate a strategy for collecting data necessary to estimate a well-specified |
| | empirical model. |
| | iii. Determine the appropriate estimation method for the empirical model. |
| | iv. Utilize statistical software to conduct such estimation and meaningfully |

| | interpret the results. | | | | | | | |
|--------------------|---|--|--|--|--|--|--|--|
| | v. Set-up multiple linear regression model. | | | | | | | |
| | <i>i</i> . Interpret the coefficients of the multiple linear regression model. | | | | | | | |
| | vii. Calculate and interpret the R ² and adjusted R ^{2.} | | | | | | | |
| | viii. Estimate the multiple linear regression model when the assumptions of the | | | | | | | |
| | classical linear model are violated (e.g. omitted variables, heteroskedasticity, | | | | | | | |
| | serial correlation) and how to estimate the models under these conditions. | | | | | | | |
| 5. Carry out indep | pendent economic research. | | | | | | | |
| | i. Develop an original economic research. | | | | | | | |
| | ii. Compile a professional literature survey | | | | | | | |
| | iii. Specify a theoretical and testable empirical model. | | | | | | | |
| | iv. Carry out econometric analysis. | | | | | | | |
| | v. Carry out effective communication of the study's principal findings and policy | | | | | | | |
| | implications. | | | | | | | |

MS- IDEC Program Goals and Learning Outcomes

Outcome(s)

<u>Primary Program Goal</u>: To train masters students as empirical economic researchers so that they are capable of carrying out fieldwork, econometric analyses of policies and programs related to international and development economics, and displaying these competencies in high-quality research papers and oral presentations.

a. Students will be able to define an economics research question appropriate to a topic of interest.

b. Students will be able to review and synthesize the existing theoretical and empirical literature in a given field of research.

c. Students will be able to design appropriate field research strategies for collecting primary data on a topic related to international and development economics.

d. Students will acquire the econometric skills required to rigorously analyze a broad range of types of data, be able to run appropriate econometric tests, and diagnose statistical problems in estimation.

e. Students will be able to tie statistical methods to microeconomic and macroeconomic theory and the literature in international and development economics, interpret econometric results, and discern the conditions under which estimations are able to yield causal relationships.

f. Students will be able to infer implications and policy conclusions from their research for other international economists, policy makers, and development practitioners.

g. Students will be able to communicate at an excellent level, both in writing and verbally, recognizing that good economic research involves not only effective technical skills but effective means of listening and responding to criticism and communicating results.

II. CURRICULUM

A. General

The Department of Economics offers three main degree programs: A Bachelor of Arts in Economics, a Master of Arts in Economics (MA-ECON), and a Master of Science in International and Development Economics (MS-IDEC). Outstanding undergraduate students are also eligible to earn accelerated graduate degrees in one of three "4+1" programs, each of which allows students to complete the requirements for both the BA in Economics (IDEF), or the MA in Economics (ECNF), the MS in International and Development Economics (IDEF), or the MS in Financial Analysis (ECFA), in a combined 5-year period. The Department is also currently in the process of submitting a proposal to the Curriculum Committee for a Bachelors of Science degree.

In addition to these degree programs offered solely by the Economics Department, we contribute to the Bachelor of Arts in International Studies (BAIS) by teaching two of the courses required of all BAIS majors, as well as teaching and advising all BAIS students in the International Economics "functional track" within the major.

The principal distinguishing features of our academic programs are:

- Rigorous training in economic theory and empirical methods;
- Faculty expertise in International, Financial, Development, and Environmental and Natural Resource Economics;
- A structured course sequence in which concepts and skills are built upon over the course of the program; and
- Opportunities to engage in original student research.

Table 4 reports the number of declared majors and minors in each baccalaureate and masters degree program over the last 5 years. Between 2009 and 2014, undergraduate majors have doubled (from 64 to 129 students), while the number of undergraduate Economics minors has increased by 67% (from 18 to 30). Graduate student enrollment has fluctuated over the period, with a mean of just under 80 students across the two programs.

Table 5 shows the number of Economics undergraduate and graduate degrees conferred over the past five years.

With respect to future trends, we have every reason to believe that the undergraduate programs will continue to grow, as students recognize the intellectual and market value of an Economics degree; this is particularly true for international students, who make up almost 40% of our majors and close to 30% of our minors. Graduate student enrollment is more difficult to predict. While there is some evidence of a counter-cyclical pattern in applications and enrollments with respect to the macro economy, the department is currently launching several initiatives to increase both the quantity and quality of applicants (see Section XII).

| | Tab | le 4 | |
|---------------------|--------------|--------------|----------------|
| Economics De | partment Maj | jors and Min | ors, 2009-2014 |

| | Fall 2009 | Spring 2010 | Fall 2010 | Spring 2011 | Fall 2011 | Spring 2012 | Fall 2012 | Spring 2013 | Fall 2013 | Spring 2014 | Fall 2014 |
|-----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
| Undergraduate | | | | | | | | | | | |
| Students | | | | | | | | | | | |
| ECON majors | 64 | 73 | 78 | 74 | 81 | 67 | 88 | 88 | 99 | 98 | 129 |
| ECON minors | 18 | 23 | 24 | 21 | 20 | 21 | 20 | 28 | 36 | 37 | 30 |
| Total | 82 | 96 | 102 | 95 | 101 | 88 | 108 | 116 | 135 | 135 | 159 |
| Graduate | | | | | | | | | | | |
| Students | | | | | | | | | | | |
| Economics (4+1) | 1 | | 1 | | | | 2 | 2 | 5 | 3 | 1 |
| MA - Economics | 34 | 31 | 37 | 35 | 36 | 31 | 35 | 32 | 42 | 42 | 37 |
| MA/MS - Intl & | 44 | 35 | 44 | 42 | 46 | 46 | 46 | 40 | 45 | 40 | 35 |
| Development | | | | | | | | | | | |
| Economics | | | | | | | | | | | |
| Intl & | | | 2 | 2 | | | 1 | 1 | | | |
| Development | | | | | | | | | | | |
| Econ (4+1) | | | | | | | | | | | |
| Total | 79 | 66 | 84 | 79 | 82 | 77 | 84 | 75 | 92 | 85 | 73 |

Table 5Economics Degrees Conferred, 2010-2014

| | 2010 | 2011 | 2012 | 2013 | 2014 (Spring only) |
|---|------|------|------|------|--------------------------|
| Undergraduate Degrees | | | | | |
| ECON majors | 27 | 20 | 17 | 16 | 13 |
| ECON minors | 10 | 16 | 6 | 11 | 11 |
| Total | 37 | 36 | 23 | 27 | 24 |
| Graduate Degrees | | | | | |
| Economics (4+1) | | 1 | | 2 | 2 |
| Masters in Economics | 15 | 16 | 18 | 11 | 16 |
| Masters in Intl & Development Economics | 13 | 18 | 22 | 15 | 16 |
| Intl & Development Econ (4+1) | | 2 | | 1 | |
| Total | 28 | 37 | 40 | 29 | 34 |

While the curricular content of the core classes (Micro, Macro, Math, and Econometrics) is fairly standardized across the discipline, instructors are free to adapt and enhance textbookbased coverage to optimize student learning. With regard to elective courses, faculty design their own curriculum, frequently combining textbook material with current academic publications to provide students with exposure to "state of the art" knowledge in the subject area.

Most undergraduate Economics courses are assigned a standard 4-units of credit, while graduate courses are assigned 3 credit units. Exceptions include the 3-credit unit sections of Micro and Macro Principles, which are open only to School of Management students, and occasional 2-unit offerings such as the Model Federal Reserve.

The undergraduate program is comparable to most other U.S. universities, as is the Masters of Arts curriculum. The IDEC program is somewhat unique, due to the required fieldwork component and its emphasis on quantitative empirical methodology (one semester of Field Research methods plus three semesters of Econometrics). Appendix A contains comparison curricula for all three programs from a range of other institutions.

B. Undergraduate Program

The undergraduate Economics major should be able to:

- 1. **Employ economic reasoning**. Specifically, to meaningfully evaluate costs and benefits in the allocation of scarce resources, and to understand the application of scientific method (theory, model and data analysis) to understanding individual and aggregate economic behavior.
- 2. Utilize economic terminology. Specifically, to develop a command of the language of macro and microeconomics, including the use of simple algebraic models, economic statistics, and graphical representations of economic relationships, especially in the applied areas of finance, international, and development economics.
- 3. Have knowledge of core economic insights. Specifically, in the case of microeconomics, to understand the supply and demand framework; the utility maximization principle and consumer choice; marginal production and cost analysis, the impact of market structure on equilibrium price and quantity, and the causes and consequences of market failure. In the case of macroeconomics, students should comprehend the nature of aggregate relationships between output, prices, and employment, and the impacts of fiscal and monetary policy on economic growth.
- 4. **Be familiar with fundamental economic institutions**. Specifically, to comprehend the roles and functions of firms, households, and the public sector in a market economy.
- 5. **Understand the most important economic policy options**. Specifically, to be able to use economic theory and methods to evaluate public policy, in areas such as taxation, regulation of firms, monetary and fiscal policy, development policies and programs, international finance, and international trade.

The Economics Undergraduate major program is highly structured relative to many other majors at USF. The program requires a set of introductory courses in microeconomics and macroeconomics, followed by intermediate courses in the same areas. At this time, students take the Economic Methods course (ECON 120) that provides the quantitative tools for the intermediate courses prior to, or concurrent with, Intermediate Microeconomics (ECON 311) in the Fall Semester of their sophomore year. This is followed by the Econometrics course (ECON 320) in their junior of senior year. In their junior year, undergraduate majors also begin concentrating on their area of emphasis, which involves a sequence of two required courses along with two elective courses. There are three concentration areas: (1) Financial Economics, (2) International Economics, and (3) Development Economics. Our department also took the advice from the external reviewers in the past program review by establishing three required seminar-type courses, called capstone courses, for Economics majors in their senior year. The capstone courses build on concentration courses and include substantial integrative writing and research components. Students who concentrate in the area of financial economics are required to take ECON 425: Financial Econometrics to fulfill the capstone requirements. Students who concentrate in the areas of international economics or development economics are required to complete ECON 479: Advanced Topics in International Economics or ECON 473: Development Microeconomics, respectively, in their senior year.

Table 6 presents the advised sequencing for entering freshman students regarding major courses, as well as a summary of the required courses in each of the three undergraduate concentration areas. Note that most upper-division courses carry pre-requisites that enforce this sequencing. There are a maximum of 4 lower division courses (16 units out of 44 total) allowed for majors. Three of these lower division courses are required core courses. All required Economics undergraduate courses, both core and concentration, are offered regularly on a fixed schedule across semesters.

Table 6. Economics Undergraduate Major Requirements

| Required Courses for All | | | | | | | | |
|--|---------------------------------|-----------|---------------------|--|--|--|--|--|
| Concentrations (24 Units total) Sequence | | | | | | | | |
| ECON 111 | Principles of | | | | | | | |
| ECON 112 | Microeconomics Principles of | (4 units) | Year 1, Fall/Spring | | | | | |
| ECON 112 | Macroeconomics | (4 units) | Year 1, Fall/Spring | | | | | |
| ECON 120 | Economic | | | | | | | |
| ECON 311 | Methods Intermediate | (4 units) | Year 2, Fall | | | | | |
| ECON 312 | Microeconomics Intermediate | (4 units) | Year 2, Fall | | | | | |
| | Macroeconomics | (4 units) | Year 2, Spring | | | | | |
| ECON 320 | Econometrics | (4 units) | Year 3, Spring | | | | | |

| Concentrat | ions (20 Units tot | al) | | | | | | | |
|--------------|--------------------|-----------|------------------------------|----------------|--------------|----------------|------------------|-----------|----------------|
| (I) Financia | al Economics | | (II) International Economics | | (III) Develo | pment Economic | s | Sequence | |
| a. Required | Courses | | | | | | | | |
| ECON 350 | Money and | (4 units) | ECON 370 | International | (4 units) | ECON 372 | Economic | (4 units) | Year 3, Fall |
| | Banking | | | Economics | | | Development | | |
| ECON 451 | Monetary | (4 units) | ECON 471 | International | (4 units) | ECON 476 | Natural Resource | (4 units) | Year 3, Spring |
| | Economics | | | Finance | | | Economics | | |
| b. Concentr | ation Electives | | | | | | | | |
| ECON 300/- | 400-Level | (4 units) | ECON 300/ | 400-Level | (4 units) | ECON 300/ | 400-Level | (4 units) | Year 3/4 |
| ECON 300/- | 400-Level | (4 units) | ECON 300/ | 400-Level | (4 units) | ECON 300/ | 400-Level | (4 units) | Year 3/4 |
| c. Capstone | Course | | | | | | | | |
| ECON 425 | Financial | (4 units) | ECON 479 | Adv. Topics of | (4 units) | ECON 473 | Development | (4 units) | Year 4 |
| | Econometrics | | | Int'l Econ. | | | Microeconomics | | |

Undergraduate Economics Courses have a default value of 4 units per course. Business School Principles of Microeconomics and Macroeconomics (ECON 101 and ECON 102, respectively) are offered in 3 unit versions. As the previous reviewers suggested that the department should establish some events that are designed to create more cohesion among undergraduate students. The Economics Department has been offering two-unit courses at the upper-division level to enrich the undergraduate offerings. These are short courses, which can be completed within half a semester. One of the 2-unit courses offered has been a "Model Federal Reserve" course, taught in conjunction with the Federal Reserve Bank of San Francisco (FRBSF). This course has been offered since 2007. One important component of the course is the University Symposium – a half-day event co-organized with FRBSF. The event has been hosted at USF since 2007. In the past years, San Francisco State University (SFSU) was invited to participate in the Symposium at USF. As the event became more popular, St. Mary's College of California (St. Mary's) was also invited to the event. The University Symposium was a key part of the course. More than a hundred participants, including USF, SFSU and St. Mary's students and faculty members, attended the Symposium. It gave a valuable opportunity for students to meet economists from the Federal Reserve Bank of San Francisco. Students from USF, SFSU, and St. Mary's also prepared for a simulated Federal Open Market Committee (FOMC) meeting in the Symposium. Student teams in the simulated meeting were required to present and make decisions on monetary policy making. Another two-unit course is called "Great Economists." The course is to take one or several Economic Nobel Prize winners and introduce students to

these economists by reading their major papers.

Students usually have no problems enrolling in the courses they need to meet the Economics Major graduation requirements. Core courses are offered on a regular schedule as are the majority of concentration electives. There are exceptions to this rule; however, as some specialty courses may not be taught if the faculty member responsible is on leave or, more frequently, the course does not receive enough enrollments for it to be viable.

Excellent students, particularly ones wanting to go on to graduate work, are directed to one the three 5-Year Joint Bachelor/Master Programs: (i) BA/MA in Economics (ECNF), (ii) BA/MS in International and Development Economics (IDEF), and (iii) BA/MS in Financial Analysis (ECFA). Under these programs, Economics majors with high GPA's can pursue both an Undergraduate BA in Economics and then, with an additional year's work, earn an MA in Economics, an MS in International and Development Economics, or an MS in Financial Analysis.

ECNF and IDEF involve a significant number of Math courses in addition to the undergraduate and graduate Economics courses. Students in these programs are better prepared for the mathematical rigor of a PhD program in Economics. The ECFA is a newly established joint 4+1 program with the Master of Science in Financial Analysis (MSFA) in the School of Management, which emphasizes the key role of economic analysis in the investment management and valuation profession. The MSFA program is structured around the body of knowledge set forth by the Chartered Financial Analyst (CFA) Exam program and has been accredited as an Academic Program Partner by the CFA Institute since 2006. Students who graduate from the MSc. in Financial Analysis program will be prepared for a number of career options, including work in the financial industry as a financial analyst, investment manager or investment advisor. Students who graduate with the MSFA degree generally pursue the Chartered Financial Analyst designation as well. Tables 7, 8, and 9 summarize the curriculum of the joint programs in Economics (ECNF), International and Development Economics (IDEF), and Financial Analysis (ECFA), respectively.

| BA/MA IN ECON | OMICS (4+1) | | | | | | | |
|--|---------------------------|-------------|------------------|-------------------------------|-----------|--|--|--|
| a. Required Under | graduate Coursework | | b. Advanced Math | Course (One of three courses) | | | | |
| ECON 111 | Principles of Micro. | (4 units) | MATH 130 | Elementary Linear Algebra | (4 units) | | | |
| ECON 112 | Principles of Macro. | (4 units) | MATH 211 | Calc & Analytic Geom III | (4 units) | | | |
| ECON 120 | Economic Methods | (4 units) | MATH 300 | Intro to Formal Methods | (4 units) | | | |
| ECON 311 | Intermediate Micro. | (4 units) | | | | | | |
| ECON 312 | Intermediate Macro. | (4 units) | | | | | | |
| ECON 318 | Game Theory | (4 units) | | | | | | |
| MATH 109 | Calculus I | (4 units) | | | | | | |
| MATH 110 | Calculus II | (4 units) | | | | | | |
| ECON (300 - 699) | Econ Elective | (3/4 units) | | | | | | |
| ECON (300 - 699) | Econ Elective | (3/4 units) | | | | | | |
| ECON (300 - 699) | Econ Elective | (3/4 units) | | | | | | |
| c. Required Gradu | ate Courses: (33 Units To | tal) | | | | | | |
| ECON 601 | Microecon: Theory/App | (3 units) | ECON (600 - 699) | Graduate Elective | (3 units) | | | |
| ECON 602 | Macroecon: Theory/App | (3 units) | ECON (600 - 699) | Graduate Elective | (3 units) | | | |
| ECON 615 | Math. For Economists | (3 units) | ECON (600 - 699) | Graduate Elective | (3 units) | | | |
| ECON 620 | Graduate Econometrics | (3 units) | ECON (600 - 699) | Graduate Elective | (3 units) | | | |
| ECON 690 | Graduate Seminar | (3 units) | ECON (600 - 699) | Graduate Elective | (3 units) | | | |
| d. Comprehensive Examination (Microeconomics and Macroeconomics) | | | | | | | | |
| *Students must suc | cessfully pass the Compre | hensive Exa | ım | | | | | |
| Total & redits & equ | ired∨&A/MA&n&CON& | 4+1):8452 | | | | | | |

Table 7. BA/MA (4+1) in Economics

| Table 8. BA/MS (4+1) in International and Development Economi | CS |
|---|----|
| BA/MS IN INTERNATIONAL AND DEVELOPMENT ECONOMICS (4+1) | |

| a. Required Undergraduate Coursework: (Must have 44 units of undergraduate coursework) | 4 units) |
|---|----------|
| ECON 111: Principles of Micro (4 units) ECON (300, 600) Econ Elective (3/A | 4 units) |
| ECON (111. Therefore of where $(4 units) = ECON (500 - 059) ECON Elective (5/4)$ | i unito) |
| ECON 112: Principles of Macro. (4 units) ECON (300 - 699) Econ Elective (3/4 | 4 units) |
| ECON 120: Economic Methods (4 units) ECON (300 - 699) Econ Elective (3/4 | 4 units) |
| ECON 311: Intermediate Micro. (4 units) | |
| ECON 312: Intermediate Macro. (4 units) | |
| ECON 415: Math. For Economists (4 units) | |
| MATH 109: Calculus I (4 units) | |
| MATH 110: Calculus II (4 units) | |
| b. Graduate Courses: (36 Units Total) | |
| ECON (60) Econ barry (λ pp. (2 units) ECON (600, 600) Econ Elective (3 u | unita) |
| ECON(001 - Microecon, meory/App (3 mirs) = ECON(000 - 099) Econ Elective (3 mirs) = ECON(000 - 099) = ECON(000 | units) |
| ECON 602: Macroecon: Theory/App (3 units) ECON (600 - 699) Econ Elective (3 u | units) |
| ECON 623: Field Research Methods (3 units) ECON (600 - 699) Econ Elective (3 u | units) |
| ECON 620: Graduate Econometrics (3 units) | |
| ECON 628: Advanced Econometrics (3 units) | |
| c1. The Field of International Economics OR c2. The Field of Development Economics | |
| ECON 670 International Trade (3 units) ECON 672 Economics of Development (3 u | units) |
| ECON 671 International Finance (3 units) ECON 673 Development Microeconomics (3 u | units) |
| d Requirement for Econometrics Courses e Graduate Seminar Requirement | |
| ECON (25): Einen ist Econometrics (2 write) ECON (20): Let'l Econo Seminar (2 v | |
| ECON 625: Financial Econometrics (5 units) ECON 679: Int l Econ. Seminar (5 u | units) |
| OR OR | |
| ECON 627: Applied Econometrics (3 units) ECON 690: Dev. Econ. Seminar (3 u | units) |
| Total Credits Required for BA/MA in IDEF (4+1): 152 | |

| BA/MSFA | (4+1) | | | | |
|-------------|--|-----------|----------|----------------------------|-----------|
| a. Required | Undergraduate Coursework | | | | |
| ECON 111 | Principles of Micro. | (4 units) | MATH 130 | Elementary Linear Algebra | (4 units) |
| ECON 112 | Principles of Macro. | (4 units) | MATH 370 | Probability and Statistics | (4 units) |
| ECON 120 | Economic Methods | (4 units) | BA 201 | Financial Accounting | (4 units) |
| ECON 311 | Intermediate Micro. | (4 units) | BA 305 | Corporate Finance | (4 units) |
| ECON 312 | Intermediate Macro. | (4 units) | | | |
| ECON 350 | Money and Banking | (4 units) | | | |
| ECON 451 | Monetary Economics | (4 units) | | | |
| ECON 415 | Math for Economists | (4 units) | | | |
| MATH 109 | Calculus and Analytic Geometry I | (4 units) | | | |
| MATH 110 | Calculus and Analytic Geometry II | (4 units) | | | |
| MATH 211 | Calculus and Analytic Geometry III | (4 units) | | | |
| c. Required | Graduate Courses: (26 Units Total) | | | | |
| MSFA 712 | Financial Markets | (2 units) | MSFA 732 | Derivatives II | (2 units) |
| MSFA 720 | Equity Valuation | (2 units) | MSFA 734 | International Finance | (2 units) |
| MSFA 722 | Fixed Income I | (2 units) | MSFA 740 | Capital Markets | (2 units) |
| MSFA 724 | Derivatives I | (2 units) | MSFA 742 | Alternative Investments | (2 units) |
| MSFA 726 | Advanced Financial Statements | (2 units) | MSFA 744 | Financial Econometrics | (2 units) |
| MSFA 728 | Ethics and Finance | (2 units) | MsFA 746 | Portfolio Management | (2 units) |
| MSFA 730 | Behavioral Fiannce and Risk Management | (2 units) | | | |
| Total&redit | s&equired∨&A/MSFA&4+1):&54 | | | | |

| Table 9. Joint BA in Economics | /MS in Financial Analy | /sis (4+1) Program |
|--------------------------------|------------------------|--------------------|
|--------------------------------|------------------------|--------------------|

Students are encouraged to generate an internship opportunity in their junior or senior year. In the Financial Economics concentration, an internship at a San Francisco financial firm provides them with practical experience in their area of interest and establishes networks that make finding a job in finance much easier upon graduation. Undergraduates may also have the opportunity to work with their professors on research projects, but again this depends upon individual student interests and initiative.

Our department also has a strong program of Economics Minor, which is structured to provide a student with a thorough grounding in economic analysis. Significant number of undergraduate Finance or International Business majors who are often doing an Economics Minor. The majority of the courses in the Economics Minor program fulfill requirements or electives in Business programs. Table 10 illustrates the requirements of Economics minor.

Table 10. Minor in Economics

| MINOR IN ECONOMIC | CS | |
|----------------------|---|-------------|
| ECON 101/111 | Principles of Micro. | (3/4 units) |
| ECON 102/112 | Principles of Macro. | (3/4 units) |
| ECON 311 or ECON 312 | Intermediate Micro. <u>or</u> Intermediate Macro. | (4 units) |
| ECON (300 - 499) | Econ Elective | (4 units) |
| ECON (300 - 499) | Econ Elective | (4 units) |

Undergraduate Advising

In responding to the past program review, our department centralizes the undergraduate advising with an Undergraduate Program advisor (Prof. Sunny Wong). The undergraduate program advisor is responsible to oversee the advising process for all undergraduate students majoring and minoring in Economics. Prof. Wong's responsibilities include: (1) reviewing graduation requirements; and (2) authorizing graduation at the end of each student's program. At the end of each semester, Economics majors with the registration hold are required to make an appointment with Prof. Wong to discuss their academic schedule for the next semester in order to make sure that students enroll into the right classes and graduate on time. Prof. Wong also helps students choose an Economics concentration that is best for them. The goal is to help students design a suitable curriculum for their academic interests and their future career paths. The undergraduate advisor also oversees the advising process for undergraduate students in the 5-Year Joint BA/MA programs (M.A. in Economics, M.S. in IDEC, and M.S. in Financial Analysis). In these joint programs, Economics majors who meet a set of minimum requirements can pursue an undergraduate BA in Economics and then with an additional year's work to earn an MA in Economics/MS in IDEC/MS in Financial Analysis. The undergraduate advisor is responsible to review students' transcripts to determine if they are eligible to apply for the program, and directs students to take a set of required undergraduate courses to prepare for the additional year of graduate work. The program advisor also participates in Webtrack Advising for Economic majors and minors every summer. He serves as the summer academic advisor for incoming students – both first-year and transfer Economics majors. Prof. Wong is responsible to review students' class schedule, and communicate with students about the courses they should take for the Fall semester both via phone and email. Throughout the summer, the advisor is also responsible to be available to answer follow up questions after the Phone Call Days. The academic advising is considered as the duty of faculty service. However, because Economics has been a surge in popularity with USF students in the past few years, two extra faculty members (Professors Michael Jonas and Suparna Chakraborty) recently serve as new academic advisors to share Professor Wong's advising responsibilities.

BAIS Advising

In addition to advising Economics majors and minors, department faculty members advise students in the International Economics functional track of the International Studies (BAIS) major. As indicated in Table 2, there are currently 28 students in this program, all of whom must meet at least once per semester with their functional track advisor for course approvals and planning.

C. Graduate Programs

Historically, recruitment for both Economics graduate programs has occurs largely through the efforts of the USF Office of Graduate Programs, which uses a combination of online, print, and in-person methods to promote the programs to potential applicants, including travel to domestic and international graduate school fairs throughout the year, and a Fall and Spring Graduate Open House on the USF campus.

1. Masters of Art in Economics (MA-ECON)

The Masters in Economics student should be able to:

- 1. Understand modern micro and macroeconomic theories and their applications to contemporary economic problems, including: decision-making in conditions of risk and uncertainty, and the role of information; open economy macroeconomics and its application to exchange rate movements and financial crises; efficiency wage models, real business cycles; and endogenous growth.
- 2. **Conduct original quantitative empirical analysis of a relevant economic problem**. Specifically, students should be able to express an economic theory in terms of an observable model; formulate a strategy for collecting the data necessary to estimate a well-specified empirical model; determine the appropriate estimation method for the empirical model; utilize statistical software to conduct such estimation; and meaningfully interpret the results.
- 3. **Carry out independent economic research**, including development of an original research question, compilation of a professional literature review, specification of a theoretical and testable empirical model; econometric analysis; and effective communication of the study's principal findings and policy implications.

The Masters Program in Economics primarily serves three student audiences. The first group is domestic students who study full time. They want to pursue a master degree in economics in order to become more competitive in the job market. The second group is international students who come to USF to do a Masters degree, often in Financial or International Economics, and then return home. These students generally go back to jobs in business or government. Some of them apply for Ph.D. programs in the United States at the end of their Masters degree. The third group consists of domestic students working full-time who want to acquire a Masters degree as a way to either improve their quantitative skills so as to improve their performance on their current job, or allow them to switch career to jobs which are more quantitative oriented.

The Masters program consists of 11 courses, 5 of which are required core courses. Of the remaining six courses, four can be used to achieve a concentration in Financial Economics,

International Economics or Development Economics. Core courses are offered in sequence once per year as are the required concentration courses. All core courses are offered in the evening as some of our students are part-time students. Elective courses are offered once a year. Nearly all elective courses are offered in the evening.

| MA Econo | omics | | |
|----------|-------|--------|--------------|
| | Apps | Admits | New Enrolled |
| 2004 | 55 | 27 | 9 |
| 2005 | 69 | 37 | 17 |
| 2006 | 74 | 33 | 16 |
| 2007 | 83 | 44 | 8 |
| 2008 | 92 | 57 | 18 |
| 2009 | 109 | 55 | 13 |
| 2010 | 103 | 54 | 21 |
| 2011 | 71 | 42 | 13 |
| 2012 | 110 | 62 | 18 |
| 2013 | 106 | 65 | 21 |
| 2014 | 107 | 60 | 12 |

TABLE 11: MA ECONOMICS Applications, Admissions and New Enrollments

TABLE 12: MA-ECONOMICS Requirements

| REQUIRED COURSES (15 UNITS) A | ALL CONCENT | RATIONS | SEQUENCE |
|--------------------------------|----------------------------------|-----------------------|---------------|
| ECON 601 – Graduate Microecono | omics | All MA courses are 3- | Fall Year 1 |
| | | units | |
| ECON 615 – Mathematical Econor | nics I | | Fall Year 1 |
| ECON 602 – Graduate Macroecon | omics | | Spring Year 1 |
| ECON 620 – Graduate Econometri | Spring Year 1 | | |
| ECON 690 – Graduate Seminar | Year 2 | | |
| CONCENTRATIONS (18 units): | | | |
| FINANCIAL ECONOMICS | IN [.] | TERNATIONAL | |
| ECON 650 – Money & Banking | ECON 6 | 670 – International | |
| | | Economics | |
| ECON 651 – Monetary | ECON 671 – International Finance | | |
| Economics | | | |
| ELECTIVES (4 COURSES) | ELECT | IVES (4 COURSES) | |
| ECON 6xx | | ECON 6xx | |

All Graduate MA Economics courses have a value of 3 units per course.

Scheduling issues arise in the Masters program because it is taught in the evenings to meet the needs of part-time students who may be working. This means that certain courses a student may want to take conflict with one another as we routinely offer 8 or more graduate classes on the four nights of the week. The only class offered on Friday evening is Mathematical Economics II, which is offered every Spring.

Space is at such a premium at USF that faculty offices are barely adequate, so it is no surprise that Masters students lack adequate resources in many aspects of the program. We have access to the small (8 computers) Social Science computer lab, but no graduate student office or study space. Graduate students must provide all their own supplies, photocopying, etc.

The Department does provide opportunities for scholarships in the form of partial tuition remission to excellent students. We also have opportunities for Tutorial Assistants and Research Assistants that are open to excellent graduate students. These opportunities alone are not sufficient for a student to support themselves in the Masters program. Surprisingly, even without financial aid our retention rate for graduate students is high and the quality of students today is significantly above those ten years ago. Graduate students who fail to finish the program usually do so because they cannot meet the minimum GPA requirement of 3.0.

2. Masters of Science in International and Development Economics (IDEC)

Director, Prof. Bruce Wydick; Administrative Director, Barbara Peña.

Overview. The USF Masters Program in International and Development Economics began in 2002 as faculty began to recognize the demand for a niche program to train students seeking to become applied researchers in the development field. We have adjusted the program in small ways over the years, changing some requirements that we think will result in better-trained graduates. In 2007 we began streamlining students into two tracks, and international (macro) track and a micro-oriented development track. In 2010 we added an advanced applied econometrics requirement (to create a required sequence of three semesters in econometrics). In 2013 we changed the degree from a Master of Arts to a Master of Science degree to reflect the extent that the degree trained students in the scientific method to address practical research questions in the international development area.

In the world of graduate programs in economics, the IDEC program is unique: students get all the rigorous training in economic theory, math, and statistics as a conventional curriculum, with the added benefit of first-hand research experience in a developing country, using that data and their training in econometrics to produce a high-quality masters thesis over the course of two years. While there are other masters programs offering development economics, none of the other leading programs requires field research in a developing country, many are only one-year programs without a thesis requirement, and none have the intensive econometrics requirement that characterizes our program. Our students learn nearly all of the econometric methods commonly taught to doctoral students (although at the masters level, our students lack the depth of background in mathematical and statistical theory that characterizes top doctoral programs). Table 1 below provides a list of IDEC course requirements.

Admissions. Applicants to the IDEC program are from highly diverse backgrounds, ranging from recent U.S. college graduates with undergraduate degrees in Economics, Business, and International Studies; to more mature individuals with work experience in the private, public, and nonprofit sectors; to international candidates coming from careers in academia, government, and finance. In the admissions process, we look for applicants with strong academic transcripts from reputable institutions (GPAs in the 3.3 and above range, with particular attention paid to grades received in Math and Economics courses), solid letters of recommendation, and personal essays that demonstrate genuine interest in International and Development Economics, as well as good writing abilities.

We are especially keen to recruit talented applicants from low and middle income countries, and offer two dedicated scholarships each year to newly admitted qualified students from the developing world. These IDEC scholarships consist of 5 tuition credits per semester for four semesters. In addition, we offer three to five merit scholarships to the highest ranking applicants with undergraduate degrees from U.S. universities, consisting of 3-4 tuition credits for 4 semesters. As students proceed through the program, they may become eligible for Teaching and/or Research Assistantships, but these are usually limited to 10 hours per week,

and shared among MA and IDEC students. Some of our students – especially international students – experience real financial hardships during their time in the program. Domestic students have the option of working part- or full-time while they pursue their studies, but this invariably alters their engagement with both faculty and peers.

Upon admission into the program, students are notified about the various enrollment procedures, and an orientation session is scheduled for the beginning of the fall semester. In addition to this group session, new students meet individually with their IDEC faculty advisor before registering for classes. The advisor helps the students plan out their coursework, as well as addressing issues related to housing, finances, and the like (this is especially important for international students).

IDEC attracts some outstanding students, not only in terms of academic talent, but also in terms of interest in and commitment to utilizing economic analysis to better understand the problems of international development. Many of them have to work hard, especially during their first year, to develop the basic skill set that will allow them to "think like economists." In this respect, we expect a great deal of them fairly early on in the program, since they are required to conceive and plan an original research program during their second semesters. The quality trend has not been linear. We have had exceptional students in every cohort, and also students who have struggled with their coursework and/or research projects.

Resources. The Social Sciences computer lab, which is heavily utilized by graduate students, has 8 PCs equipped with statistical and spreadsheet software including Stata, which is the econometric software of choice in our graduate program. The computer lab also has a number of databases that students can use.

For IDEC students' summer research fieldwork, the program has in most years been able to contribute up to \$1200 towards international travel and \$500 towards other research-related expenses. Faculty regularly pursue outside grants that are able to cover many of the field research costs of their advisees during their summer time abroad.

USF is also very fortunate in that it is part of a highly inter-connected group of researchers on the West Coast in the development economics field. Every year multiple faculty and students present their research at the Pacific Conference for Development Economics, the annual meeting of this group of researchers that attracts more than 200 participants and where 70 – 100 papers are presented over the course of the conference in March each year. Typically USF has the highest attendance at the conference of any university because of our large masters program. Usually several faculty and several students present papers at the conference.

Graduation. Each fall we typically begin with a cohort of 22-27 students, and each year we graduate about 17-20 students from the IDEC program. In other words, our graduation rate in steady-state appears to be about 75-80%. Although we currently have no system in place to formally track post-graduation placements, evidence suggests that IDEC graduates typically fall into several categories after graduation, many taking jobs in the private research sector in the international development area (e.g. IPA, J-PAL), others taking research jobs in non-

development organizations and firms (e.g. Public Policy Institute of California, IBM, Google), others returning to their home countries to take jobs in government and business, and others continuing directly into PhD programs. Typically we will have 3-4 students from every class who directly enter into a doctoral program in economics or a related field, and 2-3 more will often do this one to two years later.

Figures 2 and 3 illustrate the diversity of career paths taken by IDEC graduates.



Figure 2: IDEC Alumni by Industry, 2005-2013





The objectives for our students are the following. The M.S. IDEC student should be able to:

1. Understand the application of modern micro and macroeconomic theory to the key problems of economic development, trade and finance, this includes an analysis of market failures, poverty traps, the structure of incentives, the use of game theory to model economic behavior, open economy models of trade, models of natural resource use, migration, foreign direct investment, financial markets, and exchange rate determination.

2. Design a master's thesis research project based on summer fieldwork, including formation of an original research question, planning of an effective methodology, development of field protocols / survey instruments, and data collection in a developing or transition country. Masters theses should display a strong command of the relevant research tools needed to address a given problem and test specific hypotheses.

 Conduct original quantitative empirical analysis of an international or development economics problem. Specifically, students should be able to understand the necessary empirical methods needed to identify causal relationships, especially related to international and development issues; determine the appropriate estimation method for an empirical model; utilize statistical software to conduct such estimation; and meaningfully interpret the results.
 Effectively communicate research findings both in writing and orally, including compilation of a professional literature review, clear presentation of theoretical and empirical models, econometric analysis, and the relevance of the study's principal findings and implications for international and/or economic development theory and policy.

Our program is structured so in the course of their two years in the program, students encounter a series of checkpoints that facilitate accountability of objectives and faculty feedback on the research project. At the beginning of their second semester, students must choose a research topic in their field research methods class. At the end of their field research methods class, they must make a presentation on their research proposal and fieldwork. In their elective field classes, students present literature reviews in the area of their research. In their second-semester econometrics class, students make preliminary presentations of their research findings and solicit comments from the faculty member and other students. In the graduate seminar course, students prepare a preliminary presentation of their research. Finally, students undertake a formal oral defense of their work in front of 30-40 students and IDEC faculty at the end of their final semester. Faculty advisors are responsible for the final assessment of the Project, and issue a "Pass with Honors", "Pass," or "Pass with Revisions," or "Fail" to the student upon completion of the oral defense.

IDEC is currently in its twelfth year. During this time, it has grown and matured from a small, innovative program into a major component of the Economics Department. Some of the most important developments since its inception have been:

(1) **Increased selectivity of admissions**. While approximately 85% of the first group of applicants in 2002-03 were admitted, this has fallen to about 50% in recent years. Enrollment yields are usually just under 50% for the past six or seven years. However, as our program has grown more demanding, we seek to increase the number of applications we receive from about

120 per year to a number closer to 200 per year to attract even higher quality students. We especially would like to receive a growing number of applications from high-quality students in developing countries.

(2) **Excellent faculty hires in the last decade**. IDEC has benefited enormously from new faculty hiring over the past 10 years with the additions of Professors Cassar, Katz, Wong, Alix-Garcia, Grojean, Stopnitsky, Chakraborty, and Anttila-Huges. One major indicator of our faculty quality are the two professors who were hired away from us by Research 1 institutions: Alix-Garcia and Grojean. Our faculty now regularly publish in top journals, especially in the international and development areas. Among non-Research 1 schools, USF one of the very top schools in the international development field in terms of numbers of graduate students and research publications.

(3) **Enhanced peer support and cohort-to-cohort mentoring**. Barbara Peña has implemented a number of changes in the functioning of the program that emphasize student feedback, cooperation, and faculty-student contact and mentorship. Each student now undergoes both a first-semester check-in and an exit review. Both formally and informally, IDEC has taken advantage of each cohort's learning experiences – particularly the summer fieldwork – to allow students to learn from one another as well as from faculty regarding research methodologies and potential pitfalls.

Among the challenges we face in IDEC program are the following:

(1) **The challenge of conditionally accepted students.** About two-thirds of the students admitted into the program have fulfilled all of undergraduate requirements for beginning the IDEC masters degree. However, about a third of our students lack adequate preparation in mathematics and intermediate economics courses. How to identify students who will be successful in facing the challenges of coming up to speed in these areas quickly in the program, and how to structure the program to account for students that are unable to pass the required courses presents a challenge to us as faculty. In the past, our policy was to disqualify a student from the program if he or she received less than a B in a course required for upgrade to normal status (typically intermediate microeconomics or macroeconomics). We have changed that policy so that students are now allowed to re-take these courses in the second semester if they are successfully completed, meaning that their fieldwork must be delayed one year even if they are successfully completed, meaning that they will complete the program in three years rather than the normal two years.

(2) **Summer mathematics and statistics review**. We also struggle with developing a system to help all of our students review mathematics and statistics online in the summer prior to starting the program. We are considering different ideas to hold students accountable for reviewing these topics during the summer so that they are ready for quantitative classes in the fall when they begin the program. One idea we are currently discussing is a preliminary test in mathematics and statistics that students must take before classes start.

(3) **Field research sites**. We are still trying to determine the ideal organizational structure for summer fieldwork. Ideally we would like to develop several places around the world where our students return year after year. However, the interests of students vary each year, creating a challenge here. In this regard, the Department would like to establish ongoing exchange relationships with international universities, research centers and non-governmental organizations which can provide essential logistical support to students while they are in the field. We now insist that in most cases students work together in teams during their fieldwork, although each student is responsible for his or her own thesis and empirical work. We find that students significantly benefit from working in small teams on topics of mutual interest to advisors and students. In the future we would like to increase faculty-student collaborative research in a concentrated number of research sites would be preferable to allowing students to independently develop their topics and carry out the fieldwork.

(4) **Scholarship Funding**. We would like to be able to offer more scholarship funding for incoming students. We lose a number of good students every year to other programs that are able to offer more funding than our program. Being able to offer more scholarships would both increase the number of students in the program and increase the number that we are able to retain and graduate. Critical to our program is the system of TAships we offer in the department to our graduate students. Not only do these TAships improve the learning of our undergraduate students, they also free up faculty time from grading problem sets and individual tutoring that allows for more concentrated time on lecture preparation and research, and are highly attractive to students entering the program because it allows them a modest income to help pay for their living expenses during their period of study.

(5) **Another faculty member in the macro area.** We need to hire an additional faculty member in the international trade/finance area or political economy area in order to strengthen our offerings in this part of our program. Currently our program has one of the highest ratios of student credit hours to faculty of any department and the college. An additional faculty lines would help us to rectify this problem and solidify our expertise in the international macro area.

TABLE 13: MS-IDEC Required Courses REQUIRED COURSES (24 UNITS) FT SEQUENCE

Core Classes: ECON 601 – Graduate Microeconomics Fall Year 1 ECON 615 – Mathematical Economics, Fall Year 1 ECON 602 – Graduate Macroeconomics, Spring Year 1 ECON 602 – Graduate Microeconomics, Fall Year 2 ECON 620 – Graduate Econometrics, Spring Year 1 ECON 623 – Fieldwork Studies, Spring Year 1 ECON 625 or 627 – Financial Econometrics or Applied Econometrics, Fall Year 2 ECON 628 – Advanced Applied Econometrics, Spring Year 2 ECON 679 or 690 – Graduate Seminar in International or Development Econ, Spring Year 2

FIELD CLASSES (12 UNITS):

ECON 670 or 672 – International Trade or Economic Development, Fall Year 1 ECON 671 or 673 – International Finance or Development Microeconomics, Fall Year 1 Two other electives from the following list (that includes the above): Economics 650: Money, Banking, and Financial Institutions, Economics 663: Experimental Economics, 665: Law and Economics, Economics 670: International Trade, Economics 671: International Finance, Economics 672: Economic Development, Economics 673: Development Microeconomics, Economics 676: Natural Resource Economics and Development Policy, Economics 677: International Political Economy

| MS International and Development Economics | | | | | | |
|--|------|--------|--------------|--|--|--|
| | Apps | Admits | New Enrolled | | | |
| 2004 | 101 | 57 | 17 | | | |
| 2005 | 85 | 48 | 21 | | | |
| 2006 | 96 | 31 | 17 | | | |
| 2007 | 125 | 72 | 26 | | | |
| 2008 | 120 | 66 | 22 | | | |
| 2009 | 143 | 63 | 21 | | | |
| 2010 | 121 | 61 | 26 | | | |
| 2011 | 133 | 76 | 23 | | | |
| 2012 | 126 | 40 | 24 | | | |
| 2013 | 119 | 70 | 24 | | | |
| 2014 | 80 | 62 | 16 | | | |

TABLE 14: IDEC Admissions Statistics, 2004 – 2014

III. ASSESSMENT

The department developed a set of assessment plans in 2008, following the last Academic Program Review. These plans are attached as Appendix B. We have been fairly systematic in our collection of the data identified in those plans, including scores on common exam questions and assessment rubrics for Masters theses. The most recent assessment report was prepared in 2012, and is attached as Appendix C.

IV. FACULTY

A. Demographics

This section provides a brief description of the current faculty's teaching and research interests. Faculty curricula vitae form which these demographics are derived can be found in Appendix D.

Tenured or Tenure-Track Faculty

- 1. Anttila-Hughes, Jesse: Assistant Professor, received his Ph.D. in Sustainable Development from Columbia University in 2012. His research focuses on the human cost of climate variability and natural disasters, and his current research areas include, public health impacts of the climate; behavioral responses to new information about environmental risks; and determinants of the spread of environmental attitudes and ideas.
- Cassar, Alessandra: Associate Professor and Associate Director of LEEPS Lab (Learning and Experimental Economics Projects) at UCSC, studied in Italy at Universita' di Parma (B.A.) and Universita' Bocconi, Milano (M.A.) before receiving her Ph.D. in 2001 from University of California, Santa Cruz. Alessandra is an experimental economist currently studying the economic consequences of networked markets.
- 3. *Chakraborty, Suparna: Assistant Professor,* received her Ph.D. at the University of Minnesota. Her areas of specialization include applied macroeconomics, international macroeconomics, international finance, and development economics. Dr. Chakraborty has published research articles in the Journal of International Business Studies, Economics Letters, and the Journal of World Economic Review.
- 4. *Katz, Elizabeth: Associate Professor and Department Chair*, received her Ph.D. from University of Wisconsin, Madison. Her research areas of specialization are development economics, women in development, agricultural economics, and history of economic thought. Dr. Katz's recent research has focused on the relationship between gender, intra-household bargaining and development in Latin America.
- 5. *Lau, Man-Lui: Associate Professor and Director of MA-Econ program*, received his Ph.D. from Cornell University. His areas of specialization are microeconomics, macroeconomics, options and futures, mathematical economics and economies of East

Asia. His current research includes East and Southeast Asian economies, financial development and economic growth, and the theory of Real Options and its application.

- 6. *Stopnitzky, Yaniv: Assistant Professor*, received his Ph.D. from Yale School of Forestry in 2012. His areas of specialization include environmental and development economics, with a focus on applied microeconometrics.
- 7. Wong, Man Chiu (Sunny): Associate Professor and Director of Undergraduate Program, received his Bachelor of Science, Master of Science and Ph.D. degrees in Economics from the University of Oregon (1996-2002). His teaching and research interests include monetary policy, learning dynamics, business-cycle theory, and foreign direct investment.
- 8. *Wydick, Bruce: Professor and Director of IDEC Program,* received his Ph.D. from the University of California, Berkeley. Areas of specialization: Use of econometric, experimental, and game-theoretic tools to analyze the impact of development projects and policies, especially in the areas of microfinance, education, and health. Recent work examines the impact of microfinance, child sponsorship, animal donation programs, and aspirations.

Term Faculty

- 1. *Michael Jonas:* received his Ph.D. from UC Davis. His concentration area of specialization is monetary economics.
- 2. *Muzzi, Mario:* received his M.A. in Economics from San Francisco State University; and his J.D. from the University of San Francisco. He is a senior litigator with the law firm of Barulich Schoknicht and Dugoni. His academic research focuses on the economics of legal institutions and legal doctrines.

Adjunct Faculty

- 1. *Artus, Jacques:* received his Ph.D. from the University of California at Berkeley. After working for the International Monetary Fund (IMF) for many years, the last ten years as Deputy Directors of the European department, he started teaching at USF in 2005. His main interest is in international finance.
- 2. *Dube, Archana:* received her Ph.D. from the University of Pittsburgh. Her specialty is in health economics.
- 3. *Fitch, Todd:* received his MBA from the Berkeley-Columbia Executive MBA program.He is also a lecturer in the Economic Analysis and Policy Group at the Haas School of Business, UC Berkeley. He has over 20 years of experience in the software industry in telecommunications, medical, financial software, and analytics. His experience includes performance engineering, tools development, product development, product

management, operations, quality assurance, process engineering, and test automation. Todd holds 20 U.S. patents across a variety of disciplines.

- 4. Gonzales, John: received his Ph.D. from the University of Wisconsin, andis based in the School of Management but frequently teaches classes for the economics department. He was Principal Economist for the Centre for Cooperation with the Economies in Transition, Organization for Economic Cooperation and Development (OECD) from 1992 to 1994. His areas of specialty are transition economies, emerging market economics and monetary policy.
- 5. Lehmann, Michael: Professor Emeritus, received his Ph.D. from Cornell University and taught at the University of San Francisco in traditional and on-line venues. He is the author of <u>The Irwin Guide to Using the Wall Street Journal</u>, which sold 250,000 copies in seven editions. Prof. Lehmann also developed a popular seminar, Be Your Own Economist [®], a guide to business and investment conditions that he offers to investors, corporations and professional groups.
- 6. *Marino, Olga:* received her Ph.D. from St. Petersburg University of Economics and Engineering. Her areas of specialty are international economics and marketing.
- 7. *Patlolla, Sandhyanrani:* received her Ph.D. from the University of California, Davis. Her specialty is in agricultural economics.
- 8. *Tung, Timothy:* received his M.A. in Economics from the University of San Francisco.

Table 15 shows courses taught for the 2013 / 2014 academic year. Teaching load for tenured and tenure track professors is 2 classes per semester, with one additional class taught once every other year. Professors may be bought out of a class by obtaining grant funding, or may choose to receive a course release for every 8 Masters students advised.

Compared to other departments in the Social Science division, Economics relies much more heavily on part-time instructors (see Figure 4 below). This is true for introductory level classes, but also for some intermediate theory and electives, which are arguably courses that should be covered by full-time faculty. Relative to the total number of student credit hours (SCHs) taught, Economics has many fewer full-time faculty members: SCHs per full-time faculty member are more than double those for four out of the other five Social Science departments.

| Faculty Name | Semeste | r Course Title | Units | SCH | Faculty Name | Semeste | er Course Title | Units | SCH |
|-----------------------|---------|--|-------|-----|-----------------------|---------|--|-------|-----------|
| Anttila-Hughes, Jesse | 2013F | ECON601 - Microeconomics: Theory & Appl | 3 | 51 | Lehmann, Mike | 2013F | ECON300 - U.S. Economic History | 4 | 56 |
| | 2013F | ECON676 - Nat Resource Econ & Dev Policy | 3 | 39 | | 2013F | ECON698 - US Financial Flows | 3 | ы |
| | 2014S | ECON101 - Principles of Microeconomics | ω | 195 | | 2014S | ECON398 - US Sectoral Development | 2 | 2 |
| | 2014S | ECON101 - Principles of Microeconomics | ω | 210 | | 2014S | ECON424 - Internet Data Sources | 4 | 108 |
| | 2014S | ECON620 - Graduate Econometrics | w | 66 | | 2014S | ECON624 - Internet Data Sources | 3 | 27 |
| Artus, Jacques | 2014S | ECON471 - International Finance | 4 | 44 | Marino, Olga | 2013F | ECON112 - Principles of Macroeconomics | 4 | 116 |
| | 2014S | ECON479 - Adv Topics in Int'l Economics | 4 | 16 | | 2013F | ECON112 - Principles of Macroeconomics | 4 | 144 |
| | 2014S | ECON679 - InternationalEconomics Seminar | 3 | 15 | | 2014S | ECON1111 - Principles of Microeconomics | 4 | 160 |
| Cassar, Alessandra | 2013F | ECON102 - Principles of Macroeconomics | 3 | 198 | | 2014S | ECON112 - Principles of Macroeconomics | 4 | 64 |
| | 2013F | ECON120 - Economic Methods | 4 | 132 | Muzzi, Mario | 2013F | ECON112 - Principles of Macroeconomics | 4 | 168 |
| | 2014S | ECON463 - Experimental Economics | 4 | 16 | | 2013F | ECON370 - International Economics | 4 | 76 |
| | 2014S | ECON663 - Experimental Economics | з | 69 | | 2014S | ECON312 - Intermediate Macroeconomics | 4 | 144 |
| | 2014S | ECON690 - Development Economics Seminar | 3 | 45 | | 2014S | ECON465 - Law and Economics | 4 | 64 |
| Chakraborty, Suparna | 2013F | ECON670 - International Trade | з | 57 | | 2014S | ECON665 - Law and Economics | з | 33 |
| | 2014S | ECON102 - Principles of Macroeconomics | ы | 192 | Patlolla, Sandhyarani | 2013F | ECON1111 - Principles of Microeconomics | 4 | 160 |
| | 2014S | ECON102 - Principles of Macroeconomics | ω | 135 | | 2013F | ECON1111 - Principles of Microeconomics | 4 | 156 |
| | 2014S | ECON671 - International Finance | 3 | 33 | | 2014S | ECON112 - Principles of Macroeconomics | 4 | 168 |
| Dube, Archana | 2014S | ECON1111 - Principles of Microeconomics | 4 | 164 | | 2014S | ECON112 - Principles of Macroeconomics | 4 | 180 |
| Fitch, Todd | 2013F | ECON311 - Intermediate Microeconomics | 4 | 76 | Stopnitzky, Yaniv | 2013F | ECON280 - The Global Economy | 4 | 16 |
| | 2014S | ECON1111 - Principles of Microeconomics | 4 | 168 | | 2013F | ECON280 - The Global Economy | 4 | 64 |
| | 2014S | ECON311 - Intermediate Microeconomics | 4 | 48 | | 2013F | ECON372 - Economic Development (CD) | 4 | 56 |
| Gonzales, John | 2013F | ECON101 - Principles of Microeconomics | w | 180 | | 2014S | ECON280 - The Global Economy | 4 | 4 |
| | 2013F | ECON102 - Principles of Macroeconomics | 3 | 189 | | 2014S | ECON628 - Adv Applied Econometrics | з | 57 |
| | 2013F | ECON350 - Money, Banking/Fin Instit | 4 | 108 | Tung, Timothy | 2013F | ECON101 - Principles of Microeconomics | 3 | 186 39 |
| | 2014S | ECON451 - Monetary Economics | 4 | 44 | | 2013F | ECON102 - Principles of Macroeconomics | ω | 198 |
| Jonas, Michael | 2013F | ECON101 - Principles of Microeconomics | 3 | 228 | | 2014S | ECON102 - Principles of Macroeconomics | з | 195 |
| | 2013F | ECON425 - Econometrics of Fin Markets | 4 | 40 | | 2014S | ECON112 - Principles of Macroeconomics | 4 | 160 |
| | 2013F | ECON625 - Econometrics of Fin Markets | 3 | 66 | Wong, Man Chiu Sunny | 2013F | ECON112 - Principles of Macroeconomics | 4 | 136 |
| | 2014S | ECON101 - Principles of Microeconomics | ы | 213 | | 2013F | ECON398 - The Financial Crisis | 2 | 2 |
| | 2014S | ECON320 - Econometrics | 4 | 116 | | 2013F | ECON650 - Money, Banking/Fin Institution | 3 | 93 |
| | 2014S | ECON398 - Independent Research | 2 | 2 | | 2014S | ECON602 - Macroeconomics: Theory & Appl | 3 | 66 |
| | 2014S | ECON620 - Graduate Econometrics | ω | 66 | | 2014S | ECON602 - Macroeconomics: Theory & Appl | ы | 63 |
| | 2014S | ECON698 - Behavioral Econ Res II | ω | ა | | 2014S | ECON651 - Monetary Economics | ы | 45 |
| Katz, Elizabeth | 2013F | ECON220 - Research Method Int Stud | 4 | 40 | | 2014S | ECON698 - Analytical Fin & Management | 1 | 1 |
| | 2013F | ECON672 - Economics of Development | 3 | 60 | | 2014S | ECON698 - Economic Modeling With R | 1 | 1 |
| | 2014S | ECON220 - Research Method Int Stud | 4 | 48 | Wydick, Bruce | 2013F | ECON311 - Intermediate Microeconomics | 4 | 112 |
| | 2014S | ECON623 - Field Research Methods | ы | 48 | | 2013F | ECON311D - Intermediate Microecon Disc | 0 | 0 |
| Lau, Man-Lui | 2013F | ECON415 - Mathematics for Economists | 4 | 36 | | 2013F | ECON627 - Applied Econometrics | ω | 42 |
| | 2013F | ECON601 - Microeconomics: Theory & Appl | ω | 87 | | 2014S | ECON318 - Game Theory | 4 | 112 |
| | 2013F | ECON615 - Mathematics for Economists | ы | 75 | | 2014S | ECON473 - Development Microeconomics | 4 | 36 |
| | 2013F | ECON615 - Mathematics for Economists | ω | 72 | | 2014S | ECON673 - Development Microeconomics | ω | 33 |
| | 2014S | ECON111 - Principles of Microeconomics | 4 | 44 | | | | | |
| | 2014S | ECON312 - Intermediate Macroeconomics | 4 | 56 | | | | | |
| | 2014S | ECON455 - Options and Futures | 4 | 32 | | | | | |
| | 2014S | ECON616 - Sp Topics/Math for Economists | ω | 45 | | | | | |
| | 2014S | ECON655 - Options & Futures | 3 | 57 | | | | | |

Table 15: Courses taught by faculty during the 2013/2014 academic year

B. Teaching

Figure 4 Student Credit Hours per Full-Time Faculty, Economics and other USF Social Science Departments



The breadth of faculty background adequately spans the breadth of classes offered in both the undergraduate and graduate curricula. Foundational course sequences in microeconomics, macroeconomics, and econometrics can be covered by most faculty, and course offerings in subfields largely align with specific faculty areas of expertise and interest, e.g., in experimental economics, game theory, or environment and development economics. Course assignments are informally negotiated, with most faculty maintaining a set of preferred classes in their area and supplementing with coverage of foundational courses as needed. Faculty generally enjoy teaching the classes they teach, and the department puts a premium on maintaining faculty happiness with course assignments.

Faculty have a large amount of leeway in ensuring that classes are conducted in the manner they see fit, subject to general expectations about subject matter for more standardized courses like introductory microeconomics. To ensure coordination across course sequences,

faculty intermittently convene to discuss the appropriateness of course progressions; faculty teaching the three semester graduate econometrics sequence, for example, coordinate closely to ensure topics are covered in appropriate order and depth for student knowledge to build across semesters. Curricula are flexible, and new courses can be developed either as faculty are brought into the department or as student need or desire for new courses arises. New courses may also be created in response to demand from other departments (e.g., for interdisciplinary course work) or as a result of university-level initiatives such as the Davies Forum, a faculty fellowship to develop an honors freshmen seminar which was awarded to assistant professor Suparna Chakraborty in 2013.

The department has made some strides in adopting new and better teaching technologies. Most notable has been the adoption of in class teaching technologies such as HoverCam, which allow faculty teaching math or theory to project either computer desktop or actual pen and paper calculations onto projector screens. Faculty teaching econometrics classes will also use in class technology to demonstrate Stata or other program practices. Younger faculty are encouraged to explore new technologies and techniques and are mentored in both course content and progress by older faculty.

The department monitors students' academic achievement in a variety of ways outside of simply observing within-class student grades. An obvious primary source of data are the teaching evaluations collected at the end of each semester, which include data on student perceptions of own and teachers' performance. More directly, faculty in the department have established multiple exam mechanisms for assessing student progress. For undergraduate courses which build on a common track (e.g., principles of micro, to introductory micro) the department issues a common assessment question every semester, to be included on all exams at all levels, performance on which can be used to directly document student progression. At the Master's level the department requires comprehensive exams for both micro and macro at the end of year 1, and in addition issues a cumulative final econometrics exam covering three semesters of topics to IDEC students at the end of the their second year. Outside of the classroom, student achievement is monitored and encouraged through both advisor meetings and, for students in the IDEC Masters program, public defense of student Masters Theses at the end of the second year.

C. Research

The main areas of research focus in the department are development economics, macroeconomics, and finance. Sub areas of focus within development include applied microeonomics, gender and development, environment and development, behavioral / experimental economics, and growth; subareas within macroeconomics include international economics, growth, and monetary policy. There are no heterodox economists in the department, and while methodological and subfield differences exist members face no major barriers to communicating their work to one another.

It is worth noting that a particular specialty of the department is a "fast field work" model of paper creation that satisfies both IDEC Masters student needs for thesis projects as well as the faculty's own research needs. IDEC Masters students performing mandatory summer field research often end up working on small, simple papers using experimental methods, short surveys, or existing data sets to answer relatively simple but nonetheless literature-relevant questions. Many of the department's most notable contributions to the literature in recent years have been the direct product of this model.

Faculty research has focused around several themes in the years since the last program review, with notable accomplishments in several distinct areas. Owing to the department's focus on applied development microeconomics, one of the department's major strength areas is in impact evaluations and randomized control trials. In recent years faculty have published papers in this area on aspirations and childhood development (in the Journal of Political Economy, Economica, and the Economic Journal) and on poverty alleviating interventions such as provision of shoes or livestock (in Food Policy, World Development, and the Journal of Development Economics, among others). This area of focus overlaps with a second major research pillar of the department, experimental economics. The department has produced several high-impact papers in this area since the last review, notably on social capital in developing contexts (in the Journal of Economic Behavior and Organization, the Economic Journal, and Oxford Economic Papers, among others) and conflict (in Psychological Science and the Journal of Economic Growth). Experimental work is also represented in the large number of papers that the department has produced on credit and microfinance in recent years (in Journal of Development Studies, the Journal of Economics and Management, and Economic Development and Cultural Change, among others).

The department maintains several additional areas of focus, all of which are to some degree related to development. International economics is a notable one, with a large number of faculty contributions to this field on the topic of foreign direct investment (in *Economic Inquiry*, World Development, and the Journal of International Business Studies, among others) and international macroeconomics (in Applied Economics Letters, The B.E. Journal of Macroeconomics, and Economics Letters, among others). The department has also produced a papers on gender (in Economics Bulletin, and Feminist Economics), as well as environment and development (in both junior faculty Profs. Stopnitzky and Anttila-Hughes' job market papers). Outside of peer reviewed research the department has influenced the field through a variety of ways in the past seven years. Two faculty members have published books, Bruce Wydick's Games in Economic Development textbook and Sunny Wong's The Empirical Implications of Theoretical Models, and faculty members have written book chapters on topics ranging from gender in rural economies to Indian economic growth. Faculty have also taken on consulting and advisory positions at a variety of organizations over this period, including the World Bank, USAID, and the SFMTA; have penned multiple popular press pieces, including op-eds in the San Francisco Chronicle, San Jose Mercury News, and USA Today; and appeared on popular media venues including stories or features in The Associated Press, New Scientist, The New York Times' Freakonomics Blog, Slate.com, NPR, and CNN.com.

In order to fund research the faculty rely heavily on funds from the university's Faculty Development Fund, a full record of awards from which is available in the Appendix E. Table 16 shows recent external grant activity within the department.

| P.I.(s) in department | Year | Amount | Project detail |
|---------------------------------|------|-----------|--|
| Bruce Wydick and Elizabeth Katz | 2011 | \$280,955 | TOMS Shoes Giving Program Impact Study in El Salvador |
| | | | 2007 BASIS (USAID) Grant Awarded for Research in Commodity Networks |
| Bruce Wydick and Elizabeth Katz | 2007 | \$60,000 | and Fair-Trade Coffee in Latin America |
| | | | A Field Experiment in Ancona to Identify Optimal Asset Building Products, |
| Alessandra Cassar | 2013 | \$60,000 | current grant from Levi Strauss Foundation |
| | | | Managing Risk through Social Networks in Zimbabwe, past grant from Koch |
| Alessandra Cassar | 2012 | \$8,000 | Foundation |
| | | | Social Capital in Network-Structured Societies Before and After Disasters, |
| | | | proposal submitted to Open Research Area Plus for Social Sciences (NOT |
| Alessandra Cassar | 2013 | \$227,599 | YET FUNDED) |
| | | | 2010 BASIS (USAID/Millennium Challenge Corporation) Grant Awarded for |
| | | | "Do Child Sponsorship Programs Work? International Evidence from a |
| Bruce Wydick | 2010 | \$40,000 | Regression Discontinuity Design |
| | | | Federal Reserve Bank of Boston & Committee on the Status of Women in |
| | | | Economics Profession (CSWEP) American Economic Association Research |
| | | | Grant for "Lending to Unhealthy Firms in Japan during the Lost Decade- |
| Suparna Chakrborty | 2013 | \$8,500 | WTF?" |
| | | | 2013 BASIS (USAID) Rural Livelihoods and Institutional Reform in Artisanal |
| Yaniv Stopnitzky | 2014 | \$100,000 | Fisheries in Tanzania |

Table 16 - Recent grant activity

Expectations of quality and quantity of faculty member research output have evolved with the increasing University-level focus on research and reduction in teaching requirements over the past decade. Owing to the university's collective bargaining agreement, tenure decisions are made out of department by the Office of the Dean, in conjunction with external reviewers. Faculty are appraised on teaching, research, and service achievements individually, and as such expectations for faculty research achievement are conditional on service and teaching outcomes, with Deans' expectations over faculty research output communicated each year during the annual Academic Career Prospectus meetings. In general, junior faculty are expected to have a one or two publications in reasonably competitive field journals, or equivalent, by the end of third year review, with ample working papers and research in the journal submission cycle to demonstrate an active research agenda; at time of tenure, faculty are expected to have established a coherent research agenda in several competitive field journals or equivalent. The relatively flexible requirements on publication output metrics are seen as allowing faculty to aim for higher-risk, higher reward papers with less concern about pure quantity metrics, and has been regarded within the department as successful, e.g., with Bruce Wydick's recent paper in the Journal of Political Economy, and Alessandra Cassar's recent paper in the top-tier psychology journal Psychological Science.

Impediments to faculty research output stem largely from either scarcity of student resources or course load. While significantly improved compared to previous years, a 2 course a semester teaching load still places large demands on faculty time, meaning that most research need be conducted between semesters; the administrative demands of teaching . Research Assistant skill level is another potential constraint on faculty output; while IDEC and MA ECON Masters students are quite skilled, they nonetheless require substantial investment in new skill sets on

behalf of professors, and leave after two years, resulting in a limited productivity lifetime. One of major impediments to research productivity, access to a central computing cluster, is currently in the process of being remedied; the department is currently talking with Associate Dean of Science Chris Brooks about getting access to the new cluster, which will allow faculty to maintain ongoing data projects with multiple RAs, assisting in both graduate student and faculty research.

In coming years the department expects to evolve in several directions. The increasingly low cost of computing coupled with the university's growing presence in the data sciences implies that the economics department, like many around the country, expects to see a larger and larger emphasis on applied econometrics and data analysis. The faculty thus expect a greater degree of both teaching and research collaboration with other data analysis faculty at USF and beyond. The department will also likely establish a greater presence in the fields of environment and sustainability in years to come, both directly as a function of 2012's two-faculty-line hire in environment and development, as well as indirectly as a consequence of the University's increasing focus on sustainability, e.g., through the proposed Center for Social Justice and the Environment.

D. Service

Faculty in the department meet their service obligations in a variety of ways, most notably through advising the large number of undergraduate majors and graduate program students and supervising thesis research; IDEC Masters student advising is particularly involved in the department, and makes large demands on faculty service time. Faculty have also achieved a variety of service milestones outside of student advising, largely through organizing talks or conferences. Most notably, the department co-hosted the annual Pacific-Development conference in 2013 with San Francisco State, a major regional economics conference with over 150 attendees. The department has also maintains a weekly seminar series, and has organized or contributed to a variety of talks and seminars around campus, e.g., Ludwig Chincarini's annual student seminar on the Nobel Prizes. There are no major extension and outreach programs in the department

A major additional way in which the department faculty have fulfilled their service requirements in recent years has been through direct service engagement with the community outside the University. Several members of the department have consulted for local community organizations or major development agencies as detailed in section C above and on faculty CVs. The faculty have also engaged in a variety of popular press and media communications, including as also detailed above in section C and on faculty CVs.

E. Relationship with other Departments and Programs

The department maintains an array of ties with other departments. The department works closely with the business school in order to ensure that sufficient economics classes are taught to meet the needs of first year business students. Individual members of the department

interact with faculty across a variety of disciplines at the university, including psychology, environmental studies and science, and applied math, and faculty routinely coordinate on issues such as cross-registering students, joint degree programs, and research resources.

The department is generally pleased with its engagement with other departments at the university. Potential areas of growth are certainly identifiable, notably establishing closer ties with departments involved in the new data science major for undergrads and analytics program for Masters students, as well as exploring potential research or teaching collaborations with faculty in the Environmental Science and Studies departments. The department expects demand for both lower level economics classes (which are a requirement for the growing business student population) and upper level econometrics classes (which attract cross-registration from data science programs) to increase in the near term, which will necessitate further coordination with relevant departments. The department sees collaboration with the new data science major as particularly exciting, both in terms of students cross-registering for classes and faculty having a broader pool from which to draw research assistants.

There are no comparatively few institutional impediments to interacting with other departments or programs in other disciplines; faculty are generally free to propose collaborations and the university vocally supports interdisciplinary efforts. One of the few main impediments to collaborations with other faculty has been the lack of a central computing cluster which would allow easy collaboration on statistical work both between departments as well as between colleagues in the same department. Fortunately, the university is the in the final stages of installing a new cluster, and the economics department is excited to be among the beta test group.

G. Recruitment and Development

The department is still growing following a three tenure track position hire in 2012. Discussions at faculty meetings have concluded that the most urgent area of need for a new hire is international economics / macroeconomics, preferably with some experience in econometrics. Areas in which the department has expressed interest for further hires include development micro economic theory, applied political economy and development, and applied econometrics. There are no anticipated retirements among tenured professors in the department in the next five years, although some adjunct and emeritus professors may retire during that period.

The departmental approach to professional development is firmly grounded in a collegial research atmosphere. Since the department is small, colleagues all know each other, and interact with each other on a regular basis to give feedback on research, teaching, and advising. Junior faculty are mentored by senior faculty both formally and informally, and special care is given to advising tenure-track assistant professors on tenure package expectations. Senior faculty are encouraged to develop new courses as the need arises, and may receive university support in the form of course releases or funds on a case by case basis. All faculty find an additional engine of professional development in the IDEC Masters program; since each year brings demand for a fresh crop of original research suitable for Masters theses, the faculty must

generate new feasible research topics on an annual basis to attract potential advisees. At a higher level, the university generally encourages collaborative work, and several of the faculty have begun exploring potential collaborations with faculty in other departments such as applied math and the business school.

V. DEPARTMENTAL GOVERNANCE

With relatively few faculty members, the governance structure of the Economics Department is simple and somewhat informal in nature. The Department Chair is chosen by consensus and serves an indefinite term, subject to annual review and feedback. Departmental meetings are held monthly; a draft agenda is circulated by the Chair and full-time faculty and staff are invited to add items before it is finalized. At the meetings, all issues are discussed openly and frankly, and decisions are almost always reached by consensus.

The undergraduate program and each graduate program has its own faculty Director who oversees student advising and curriculum development, and in the case of the graduate programs, admissions. One faculty member coordinates the departmental seminar series, and another coordinates the administration of the undergraduate program assessment activities. Others take responsibility for short- and medium-term duties as these arise, including representing the department on College and University-level task forces, committees, and advisory boards.

VI. STUDENTS

Recruitment

The overall recruitment objective for the department is to attract and retain technically competent students eager to apply economic reasoning to real-world issues and policies. This goal spans across the graduate and undergraduate programs offered by the department. Within this overarching objective, the department has a number of specific goals in recruiting graduate students for the IDEC and Masters programs.

IDEC

We are especially keen to recruit talented applicants from low and middle income countries, and offer two dedicated scholarships each year to newly admitted qualified students from the developing world. These IDEC scholarships consist of 5 tuition credits per semester for four semesters. In addition, we offer two merit scholarships to the highest ranking applicants regardless of country of origin, consisting of 3 to 4 tuition credits for 4 semesters.

As students proceed through the program, they may become eligible for Teaching and/or Research Assistantships, but these are usually limited to 10 per semester, and shared among MA and IDEC students. Some of our students – especially international students – experience real financial hardships during their time in the program. Domestic students have the option of working part- or full-time while they pursue their studies, but this invariably alters their engagement with both faculty and peers.

In the admissions process, we look for applicants with strong academic transcripts from reputable institutions (GPAs in the 3.5 and above range, with particular attention paid to grades received in Math and Economics courses), solid letters of recommendation, and personal essays that demonstrate genuine interest in International and Development Economics, as well as good writing abilities. In reviewing applications, the department strives to identify students of promise, in particular from developing countries, even if they do not have a stong technical background for graduate-level training in economics.

Applicants to the IDEC program therefore come from highly diverse backgrounds, ranging from recent U.S. college graduates with undergraduate degrees in Economics, Business, and International Studies; to more mature individuals with work experience in the private, public, and nonprofit sectors; to international candidates coming from careers in academia, government, and finance.

Recruitment in this way aims to achieve a balance between admitting students based exclusively on prior academic training (in rigorous quantitative subjects like mathematics, statistics, computer science, etc) and other forms of training, including diverse life and work experiences, that provide a basis for success in the program. The program is also enriched by having a student body that reflects a diversity of academic and personal experiences, even if this effort sometimes requires additional resources and attention be paid to some students in the form of advising and mentorship.

With that said, the department is continually seeking ways of increasing the number of applications from students who reflect both our emphasis on technical competency and diverse life experiences. Without comprising our goal of identifying and training promising students, who might not have a conventional economics background, the department feels there is scope for improving the average quality of the student body. In the 2014 application round, for example, we have reached out to colleagues at universities across the country to encourage them to discuss USF graduate economics training with potentially interested students.

IDEC attracts some outstanding students, not only in terms of academic talent, but also in terms of interest in and commitment to utilizing economic analysis to better understand the problems of international development. Many of them have to work hard, especially during their first year, to develop the basic skill set that will allow them to "think like economists." In this respect, we expect a great deal of them fairly early on in the program, since they are required to conceive and plan an original research program during their second semesters.

The quality trend has not been linear. We have had exceptional students in every cohort, and also students who have struggled with their coursework and/or research projects. Overall, however, the number of students with good academic backgrounds and the ability to excel at a graduate level has increased over the past five years.

MA Econ

The Masters Program in Economics primarily serves two student audiences. The first group consists of domestic students working full-time who want to acquire a Masters degree as a way to either improve their job or go on to a Ph.D. program in Economics. The second group is international students who come to USF to do a Masters degree, often in Financial or International Economics, and then return home. These students generally go back to jobs in business or government. Some of them apply for Ph.D. programs in the United States at the end of their Masters degree.

Recruiting for this program happens through Graduate Program events sponsored by USF and through the USF website. There is little or no program-specific advertising and no advertising budget is allocated to this legacy program.

Demographics

The department is able to serve this typically diverse student body well. The faculty draws upon many combined years of field work experience in numerous developing countries, which provides insight in to cultural differences for many of the countries and regions from which our student body is drawn. Faculty speak natively and non-natively the natural language of most of students, including, of course, English, but also Mandarin, Cantonese, Spanish, French, Italian, Portuguese, and Indonesian. This international character of faculty experience and knowledge blends well with our diverse student body and student interests. Rough balance in the gender of faculty in the department also helps support an approximately gender-balanced student body.

Upon admission into the program, students are notified about the various enrollment procedures, and an Orientation Session is scheduled for the beginning of the Fall semester. In addition to this group session, new students meet individually with their IDEC faculty advisor before registering for classes. The advisor helps the students plan out their coursework, as well as addressing issues related to housing, finances, and the like (this is especially important for international students).

Intellectual and Social Climate

The intellectual climate in the department is highly collegial. This sentiment begins with faculty, many of whom collaborate on research projects with each other and guest lecture in each

others' courses. But it also extends to the student body. Students are encouraged in many classes to work in groups, which generally fosters cooperation, camaraderie, and a sense of ingroup identity within cohorts. Among IDEC students who work on thesis projects based in the same country, this intense two-month field experience often serves to create strong bonds among students. (Occasionally, of course, the opposite occurs, but in the main this has not been a serious issue).

Socially, the student cohorts for all departmental programs are typically strong. Students report numerous friendships that extend outside the classroom. Many students and some faculty members participate together in intra-mural sports, the most common of which being soccer and swimming.

Students are encouraged to meet, collaborate and share concerns with faculty, but they do not sit formally on any faculty or departmental committees.

Academic Expectations and Progress

Every attempt is made to ensure that students understand the department's academic expectations. This process begins for many students when they visit campus to learn more about the program even prior to submitting their applications. It continues with regular communication after acceptance from department representatives. In particular, upon admission into the program, students are notified about the various enrollment procedures and an orientation session is scheduled for the beginning of the Fall semester. In addition to this group session, new students meet individually with their IDEC faculty advisor before registering for classes. The advisor helps students plan out their coursework, as well as addressing issues related to housing, finances, and the like (this is especially important for international students).

Because advisers and program directors interact with students regularly via the core sequence of courses, and because students begin working with faculty in their first term on potential summer thesis projects, there is substantive opportunity for providing feedback on progress and ensuring that students understand how they are performing.

Student retention is typically strong, with roughly 80-85% of each entering class graduating within two years of entering the program.

VII. STAFF

The administrative support staff of the Economics Department consists of a full-time Program Assistant, a full-time Administrative Director and two part-time student assistants. The two student assistants work a combined weekly total of 23 hours. Turnover in the Economics Program Assistant position has not been high. Since 2004, the Department has had three Program Assistants. In 2006, the position of Administrative Director was created because one Program Assistant is inadequate to meet the needs of the Department. The same individual has been in the Administrative Director position since then. The size and nature of the undergraduate program (90-100 students), two graduate programs (80-90 students) and the number of current full-time faculty (10) and adjunct faculty (5-6) result in a constant stream and volume of administrative work throughout the year.

The Program Assistant's responsibilities are the day-to-day duties of preparing routine correspondence, which includes processing and preparing graduate application materials, coordinating the logistics for the various weekly/monthly/yearly Department events including faculty searches, replying to daily email inquiries, telephone calls, fielding office traffic, reconciling office and department expenses, day-to-day supervision of two part-time student assistants, initiating various payments, maintaining Department files and systems, website updates, and assisting the full-time faculty members and the Department's numerous adjunct instructors with the various administrative processes as well as special projects as needed. The Administrative Director's (AD) responsibility includes oversight of all administrative functions, procedures and protocols within the Department, supervision and performance evaluation of the Program Assistant and general oversight of the two student assistants. The AD works directly with the two Graduate Program Directors and Department Chair, as well as other Departments throughout the University to independently establish administrative structure and implement administrative processes for the Department and the programs. The responsibilities of the AD have evolved over the years and responsibilities now also include alumni relations and development, marketing and recruitment strategies (social media and newsletters), developing and implementing internal communication plans, exit interviews, regular semester meetings with graduate students, point person for reviewing and navigating legal documents and contracts through the proper University channels, student recruitment at University events, and primary point person for the onboarding of 40-50 incoming graduate students each fall semester in addition to special projects assigned.

Professional development opportunities for the administrative staff are provided by University's Human Resources Department as well as the Center for Instruction & Technology; e.g.; time management, communication, supervision, self-evaluation process for performance reviews, and various trainings and updates on University system technologies.

VIII. DIVERSITY AND INTERNATIONALIZATION

Reflecting the overall diversity of the USF student body, both undergraduate Economics majors as well as our graduate students come from a wide range of racial, ethnic, and national backgrounds.

Data from 2008-2014 indicate that, on average, about one third of undergraduate Economics majors are international students. Domestic Caucasian, Asian, and Hispanic/Latino students make up approximately 30%, 15%, and 10%, respectively, of undergraduate majors. (See Table 17 and Figure 5 below)

Table 17 and Figure 5Undergraduate Economics majors by Race, Ethnicity, and Nationality, 2008-2014

| Count of ID ECON MAJ | | - | - | | - | | |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| ETHNIC | 200840 | 200940 | 201040 | 201140 | 201240 | 201340 | 201440 |
| White | 22 | 7 | 18 | 11 | 11 | 12 | 17 |
| Asian | 9 | 7 | 8 | 7 | 5 | 8 | 10 |
| African American | 2 | 2 | 1 | | 1 | 4 | 4 |
| Pacific Islander | 1 | 1 | 1 | | | | |
| International | 9 | 14 | 4 | 19 | 17 | 23 | 29 |
| Native American | | 1 | 1 | 1 | 1 | 1 | |
| Hispanic or Latino | 4 | 2 | 7 | 4 | 6 | 5 | 10 |
| Prefer not to Disclose | 9 | 1 | 1 | | 2 | | 2 |
| Total | 56 | 35 | 41 | 42 | 43 | 53 | 72 |



The two Economics graduate programs are likewise quite diverse with respect to the makeup of the student body. The MA-ECON program is more than half international students, with the remainder made up of largely White and Asian domestic students (see Table 18 and Figure 6 below).

| Table 18 and Figure 6 |
|---|
| MA-ECON students by Race, Ethnicity, and Nationality, 2008-2014 |

| Count of ID MA ECON | | | | | | | |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| ETHNIC | 200840 | 200940 | 201040 | 201140 | 201240 | 201340 | 201440 |
| White | 11 | 2 | 3 | 2 | 1 | 4 | 3 |
| Asian | 4 | 2 | 2 | 4 | 1 | 4 | |
| African American | | 1 | | | | 1 | |
| International | 11 | 9 | 12 | 6 | 13 | 12 | 9 |
| Hispanic or Latino | 2 | | 1 | 2 | 3 | 1 | |
| Prefer not to | 4 | 2 | | | | | |
| Disclose | | | | | | | |
| Total | 32 | 16 | 18 | 14 | 18 | 22 | 12 |



The IDEC student body is less heavily international than is the case for MA-ECON: over the seven-year period, international students have made up an average of approximately 36% of all IDEC students. Domestic students in the IDEC program are mostly White (an average of 35% of all IDEC students). (See Table 19 and Figure 7.)

| Count of ID IDEC | | | | | | | | | | |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--|--|--|
| ETHNIC | 200840 | 200940 | 201040 | 201140 | 201240 | 201340 | 201440 | | | |
| White | 14 | 11 | 6 | 11 | 7 | 11 | 3 | | | |
| Asian | 2 | 2 | 3 | 2 | 3 | | 1 | | | |
| African American | 2 | 1 | | 1 | 5 | 3 | 1 | | | |
| Pacific Islander | 1 | | | | | | | | | |
| International | 16 | 8 | 13 | 8 | 4 | 7 | 7 | | | |
| Hispanic or Latino | 1 | 2 | | 1 | | | 1 | | | |
| Prefer not to Disclose | 9 | 2 | 2 | | 5 | 3 | 1 | | | |
| Total | 45 | 26 | 24 | 23 | 24 | 24 | 14 | | | |

Table 19 and Figure 7MS-IDEC students by Race, Ethnicity, and Nationality, 2008-2014



With regard to the gender composition of the student body, women make up approximately 38% of undergraduate Economics majors, 55% of MA-Econ students, and 70% of IDEC students. See Figures 8, 9 and 10 below.



Figure 8: Undergraduate Economics Majors by Sex, 2008-2014

Figure 9: MA-ECON Students by Sex, 2008-2014





Figure 10: MA/MS-IDEC Students by Sex, 2008-2014

With respect to full-time faculty, the department is comprised of five white men, two white women, one Asian woman, and two Asian men. Of these ten faculty members, four are foreign-born.

IX. TECHNOLOGY AND INFORMATIONAL RESOURCES

A. Technology

Department needs for hardware and software are notable and have been increasing with time as economics, and especially econometric and statistical analysis, has become more grounded in empirical data analysis and the use of large data sets. Faculty currently negotiate appropriate work computers upon hire, and have expressed broad satisfaction with their personal computers. At present there are no unmet needs for software licenses, with faculty able to use up-to-date versions of Stata, Matlab, and similar software as needed. One growing area of need is access to a multiple-use computing cluster with both large amounts of processing power and memory, as well as a shared file structure for collaboration between users. This need is expected to intensify as the department expands into more data intensive analysis, in particular as the department attempts to further integrate Masters student thesis research needs with existing faculty research projects. The department is expecting this need to be met by the computing cluster currently being assembled under the supervision of Associate Dean of Sciences Chris Brooks.

Economics is an increasingly data-driven field, and as a result the suite of technical computing skills required to be an active researcher in the discipline is steadily expanding. All applied economists need to have some basic skills in data organization and management as well as statistical analysis, typically using the statistical software package Stata, or something similar packages such as R or SPSS. Depending on specific area of research focus economists may also need to be proficient in use of Matlab, ArcGIS or equivalent spatial software, and a growing body of economists incorporate additional programming and coding languages, notably Python, into their research. Given the huge role technological literacy has in success in the field the department places a strong emphasis on incorporating technology into classes where apt. The three semester econometrics sequence for graduate students and one semester undergrad econometrics class are the most notable venue for this training, with students trained explicitly in data analysis skills using Stata; the undergraduate and graduate research methods classes are another, and familiarize students with basic concepts of data management. Students either being advised or working as a research assistant for faculty also receive extensive training in relevant skills during the course of their menteeship.

Technology has also played a role in the delivery of curricula within the department, with different teachers using educationally-relevant technology in different ways depending on context. Almost all faculty use Blackboard to distribute course materials, present class materials using in class room projectors, and take advantage of the general technical infrastructure provided on campus. A few faculty have adopted new technologies for use in better teaching mathematics and theory, notably HoverCam document cameras for live projection of paper documents and PDF annotation software for marking up technical texts; the department has no specific plan for expanding the use of these devices, but supports faculty decisions to do so as apt. Faculty teaching methods classes will often also teach students how to use Stata or perform similar data analysis using digital projectors. Lastly, the department has started to turn

to MOOCs and other online learning resource such as the Khan Academy as a means of providing remedial summer background instruction for conditional admits to graduate programs, students needing refreshers after a long break from school, and similar. The department is still assessing the effectiveness of these efforts.

B. Library

The department in general finds the library's holdings and services to be satisfactory for most teaching purposes. The library staff are helpful and materials are easy to place on reserve for students. The department has found the library's offerings to be somewhat more limited from a research side, mainly due to the paucity of journal coverage. Journal coverage at present is lacking in several major areas, ranging from top five journals (e.g., the *American Economic Review* is only available with a 2 year lag) to relevant field journals (e.g., *Journal of Development Studies* is only available with a one year lag) to top science journals (*Nature: Climate Change*, and *Nature: Goescience* are both unavailable). The department is working with the administration to expand access to journals, and would be interested in convening with representatives from other departments to identify systematic areas of need.

X. FACILITIES

In 2008 the Economics Department moved from the sub-standard fifth floor of University Center to the fourth floor of the Cowell building. Even if offices were not renovated as good as in the adjacent Kalmanovitz Hall, this move has been a major upgrade of our work facilities. All faculties have now offices with windows (which will need at some point some major repairs since they are extremely old and inefficient), and we have now enough space for staff and adjunct offices. Adjacent to our block of offices there is a state of the art meeting room, which we hoped would be completely for the Economics Department for faculty meetings, meeting with the students, seminar speakers, etc... Instead, given the scarcity of space at USF, this room is available to anyone on Campus, so it is often difficult for us to reserve it unless we plan meetings a lot in advance.

Teaching-wise, in the past few years USF has conducted major upgrades to its instructional facilities. The majority of the classrooms have now good technology capabilities: overhead projectors linked to a laptop or video player, whiteboards, and, in a few cases, recording capabilities. The vast majority of classroom size allows for 40-45 students, and a few classrooms allow for 120. This size is good for the Econ majors, but is somewhat limiting for the Department capability to meet the increased demand by the Business School for Principles of Economics sections, which could be much larger in number.

One major improvement would be if next to our floor we could get a classroom equipped with computers solely dedicated to our graduate students. With its emphasis on fieldwork studies, often combined with experiments, the IDEC program (and somewhat even the Econ program)

requires students to work many hours a day on a computer, so we need better equipped computer facilities for students, an increased number of computers and databases as well as space for students to work next to faculty. At the moment, our grad students share a room with the undergraduates, but it doesn't have sufficient work-space and it is always crowded and noisy.

In conclusion, we would really appreciate having a conference room to use for faculty meetings, consultations with faculty regarding fieldwork projects, meetings with seminar speakers, and, in the down-time, dedicated study areas for group work on research. Also, we could use time much more efficiently if we could schedule classes closer to our offices and not on Lone Mountain or Education building.

XI. CONCLUSIONS

The USF Economics Department is a strong, cohesive program serving a diverse body of undergraduate and graduate students. As the undergraduate enrollment trends suggest, Economics is becoming an increasingly sought-after major within the College of Arts and Sciences, and a popular minor, particularly for Business students. Our graduate programs are doing an excellent job of training young economists, with particular strengths in the fields of finance and empirical international and development economics. Faculty members are productive and innovative in their respective areas of research and teaching, and the Department is increasingly integrated into other College interdisciplinary programs, including International Studies, Environmental Studies, and Urban Studies.

Since the last Academic Program Review in 2007, the Economics Department has undergone significant changes with respect to staffing, programs, and curriculum. We have successfully replaced retired professors with young, dynamic junior faculty members, strengthened the leadership and curriculum content of the undergraduate program, enhanced the coherence and rigor of the graduate programs, and integrated the department more fully into the College of Arts and Sciences, while continuing to serve large and growing numbers of School of Management students.

The principal challenges currently facing the department are overreliance on part-time faculty, especially for undergraduate teaching, and limited financial aid resources for graduate students, which affects both the quantity and quality of graduate enrollments. These issues are addressed in Section XII below.

XII. COMPREHENSIVE PLAN FOR THE FUTURE

The Department's goals for the next five years are centered around our desire to continue to build and strengthen our undergraduate and graduate programs, and to well serve the students in other departments and programs with which we are affiliated. In order to accomplish these goals, we need to reduce our reliance on part-time instructors, strategically pursue new full-time, tenure track faculty hires in the fields of greatest relevance to our students, and work with the College and University administration to invest in attracting highly qualified students into our graduate programs.

To these ends, the areas of development we plan to focus on are:

- 1. Undergraduate program
- A. Curriculum diversification and development

As the Economics major grows, the Department needs to be able to offer a sufficient number of sections of required courses, including principles, theory, methods, and electives. Despite having recently doubled the number of intermediate theory classes on offer, for example, these classes are regularly overenrolled. Elective options are quite limited; this is particularly true for lower-level electives that might be accessible and of interest to non-majors seeking some exposure to economics without necessarily taking (and as an alternative to) the traditional introductory classes in Micro and Macro Principles. We would also like to be able to expand our service offerings to the Core curriculum and interdisciplinary programs with classes such as Urban Economics, Economics of Poverty, and Economics of Gender.

One initiative that is already underway is to offer qualified undergraduate majors an option to receive a Bachelor of Science (B.S.) degree. After consulting the curricula of other institutions, we have drafted a proposal for a course of study which would be differentiated from the BA degree by the addition of MATH 110 (Calculus and Analytic Geometry II) and ECON 415 (Mathematics for Economists) as required courses (see Appendix F). If approved by the Curriculum Committee and the Dean, this option would provide the opportunity for quantitatively-oriented students to deepen their mathematical and statistical training, and arguably graduate with a more valuable degree.

B. Advising

Also in response to the growing popularity of the Economics undergraduate programs, the Department needs to revisit our undergraduate advising system. Currently, we rely heavily on the Undergraduate Director to provide one-on-one academic advising to most of our 160 majors and minors. We would like to learn about the advising models from other larger departments, in order to better distribute the responsibilities among faculty and staff, and provide excellent guidance and mentoring to our students as they progress through the

program. To this end, a new undergraduate advising protocol has just been put into place in Fall 2014; we should be able to evaluate its efficacy by the end of the academic year.

2. Graduate programs

Applications and admissions to both graduate programs have fluctuated over the past 10 years, reflecting in part a counter-cyclical movement with the macroeconomy, as well as competition from other programs that are better able to offer significant financial aid packages. The Department is developing a recruitment plan to stabilize enrollments and enhance the quality of applicants. This plan has three elements:

- (1) internal recruitment from among USF undergraduates, including building up the 4+1 programs;
- (2) domestic student outreach through faculty campus visits and networking, with a focus on Bay Area academic institutions; and
- (3) international student recruitment, with a focus on China and developing countries where faculty carry out research.

This recruitment plan, which has the full support of the Associate Dean and the Director of Graduate Admissions, needs to be complemented by a commitment on the part of the university to funding graduate student scholarships. This is particularly important if we want to be able to attract students who are considering competing offers from Ph.D. programs, and students from low and middle income countries who would otherwise not be able to enroll – and who in some cases may be eligible for matching funds from their home governments. We would like to encourage the USF administration to view an enhanced graduate scholarship budget as an investment in assuring a more stable stream of (partial tuition-paying) diverse, qualified students, and not simply as a cost to be incurred.

3. Faculty recruitment and development

The Department is stretched thin with regard to full-time faculty resources. We rely too heavily on part-time instructors for undergraduate teaching, which is precisely our area of strongest growth in demand. Initial conversations among faculty members have tentatively identified several priority fields for new hires, including macroeconomics and political economy. Following the Academic Program Review process, we hope to receive authorization for 1-2 new faculty lines which would allow us to bring our student credit hours to full time faculty ratio more in line with the rest of the College.