#### **Florida Board of Governors**

#### **Request to Offer a New Degree Program**

#### (Revised May 14, 2010)

University of South Florida University Submitting Proposal Fall 2010 Proposal Implementation Date

Arts and Sciences Name of College or School

Economics Name of Department(s)

Economics Academic Specialty or Field

Doctor of Philosophy 45.0601 Complete Name of Degree (Include Proposed CIP Code)

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

December 3, 2009 Date Approved by the University Board of Trustees

Executive Vice President & Provost

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

NOTE: The revisions to projected program costs represent a technical correction of minor calculation errors in the original proposal.

Implementation	Projected Student		Projected Program Costs		
Timeframe	Enrollment (From Table 1)		(From Table 2)		
	HC	FTE	Total E&G Funding	Contract & Grants Funding	E&G Cost per FTE
Year 1	24	18.0	\$418,182		\$23,232
Year 2	26	19.5			
Year 3	28	21.0			
Year 4	30	22.5			
Year 5	32	24.0	\$504,068		\$21,025

*Note: This outline and the questions pertaining to each section* <u>*must be reproduced*</u> *within the body of the proposal to ensure that all sections have been satisfactorily addressed.* 

#### **INTRODUCTION**

#### I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The following is a proposal to create a free-standing PhD in Economics from an existing Economics track in the PhD in Business Administration.

In a reorganization designed to advance the strategic directions and priorities of the University of South Florida, in academic year 2008/9 the Department of Economics was moved from the USF College of Business to the USF College of Arts and Sciences. The purpose of this realignment was to remove the Economics programs from the more academically constrained environment of Business to the academic core of the University. For several years the Department of Economics had been building alliances with the USF Health colleges (Medicine, Nursing, and Public Health) and with Arts and Sciences programs such as Mathematics. The placement of the doctoral Economics track within the PhD in Business Administration meant that the Department had to design and develop its curricula to complement those of the other Business disciplines. The move to Arts and Sciences will allow for the development of a broader-based Economics program with greater scope for curricular innovation opportunities through partnerships with other disciplines in the College of Arts and Sciences, USF Health and other academic units.

With the Department's move to the College of Arts and Sciences, it is valuable to convert the existing ten-year-old doctoral track to a stand-alone doctoral program in Economics. As described above, this change is consistent with the strategic direction of the Department and its realignment with the College of Arts and Sciences. This change is also consistent with the University's Strategic Plan to increase graduate education and to produce a highly skilled, high wage workforce. The proposed **PhD in Economics** will provide graduates with a competitive advantage not evident with a **PhD in Business Administration (concentration in Economics)**.

The proposed program will continue to train students to take positions as research and academic economists in health and allied fields, business, government, universities, and development and international organizations. The move to a PhD program in Economics will distinguish USF graduates as having received training that is appropriate for carrying out high level economic research and analysis. Our students will now receive the standard degree held by the vast majority of professional economics program is considered by the National Science Foundation (NSF) a degree in STEM and is catalogued under Science and Engineering (S&E) by Science Resource Statistics (SRS) as opposed to an Economics degree from a track in Business, which is not so classified. In addition, because students will no longer be required to take business foundation courses, the proposed economics PhD program will deliver a stronger economics foundation.

The proposed degree program will be an applied program in Economics with a specialization in Health Economics. While health economics is at the core of the PhD program, we also offer other important fields in economics – Industrial Organization, Public Economics, Urban/Regional Economics, and International/Development Economics – as support fields but with a health economics slant. For example, coursework and student research in industrial organization are geared towards an understanding of how the health care industry is organized both domestically and internationally while the urban/regional field fits in neatly with the health issues in an urban environment (also see section IX C). The Economics Department made a strategic decision to narrow the focus of its PhD program partly in response to the recommendations of an external panel that reviewed the program in 2004 (see section VI and Appendix C). While the doctoral program will have health economics at its core, students may write their dissertations in the other areas mentioned above.

The proposed degree program is different from degrees in Health Policy or Public Health. Doctoral programs in Health Policy and Public Health, such as those in Health Policy offered by Harvard University or the Health Policy Management Program at Johns Hopkins University, are less focused although they may include economics as one of the disciplines. **USF's proposed program, on the other hand, is an Economics PhD program with Health Economics as a major field of specialization**. Although some other fields, such as Industrial Organization, Public Economics, and International/Development, may be offered, Health Economics will be the signature field of specialization. The program will therefore provide students with training that traditional PhD programs offer. Graduates from the proposed program will be able to accept jobs in regular economics departments, health policy and public health schools, government, private sector, and international organizations.

Models of PhD programs that are similar to our proposed program are the economics PhD programs at Vanderbilt University and the University of California at San Diego. Although both are Economics PhD programs that offer the required theory, modeling and research skills as well as other fields, each has chosen one field as its signature field of specialization. In the case of the University of California at San Diego, the signature field is Econometrics from which there have been two Nobel Laureates; for Vanderbilt University, the signature field of specialization is Development Economics. USF has chosen Health Economics to be our signature field of specialization, consistent with USF's strategic focus in Medicine, Public Health, Nursing, and Behavioral/Mental Health.

The proposed program emphasizes Health Economics for a number of reasons: First, it is consistent with the SUS Strategic Planning Goals (see Appendix B). Second, this focus capitalizes on the strengths of the Department's faculty. Out of the 11 faculty members actively participating in the PhD program, three are health care economists; two are industrial organization economists whose research focuses on the health care and pharmaceutical sectors, one is a labor economist who conducts research on the health on economic development (see Section IX D and Appendix E for recent faculty productivity). Finally, the program is designed to take advantage of the academic resources of USF Health at the University of South Florida as this offers economies of scale and of scope in the production of degrees.

Having offered a track within the PhD in Business Administration for a decade, the department is currently training and has graduated several PhD students in Health Economics. Out of the 11 students who have graduated from the program to date, 8 have written their dissertations in Health Economics. Titles of dissertations written in Health Economics include the following:

- 1. "Certificate of Need Regulation in the Nursing Home Industry: Has it outlived its Usefulness?"
- 2. "Adolescent Alcohol Use and Educational Outcomes"
- 3. "The Causal Effect of Alcohol Consumption on Employment Status"
- 4. "The Single Market and Pharmaceutical Industry in the European Union: Is there any Evidence of Price Convergence?"
- 5. "Malaria, Labor Supply, and Schooling in Sub-Sahara Africa"
- 6. "The Effects of Depressed Mood on Academic Outcomes in Adolescents and Young Adults"
- 7. "Medicare Part D Program: Prescription Drug Plan Copayment Structure and Premium Sensitivity"
- 8. "Globalization, Migration, and the US Labor Market for Physicians: The Impact of Immigration on Local Wages"

The dissertations listed above illustrate how we will combine other fields with Health Economics. For example, dissertations 4 and 7 combine Industrial Organization and Health Economics, dissertations 3 and 8 combine Health Economics and Labor Economics, while dissertation 5 combines Health Economics with Labor Economics and Development Economics. The core of all these dissertations is Health Economics with the other fields as supports. (See Appendix B for information on placement of graduates). Two students successfully defended their dissertations in health economics and graduated in December 2009. Another student defended his dissertation and graduated in the Spring 2010 semester.

Of the students currently enrolled in the program, six students have advanced to candidacy and are writing their dissertations; another four have completed their coursework and will advance to candidacy soon. The remainingstudents are continuing to take courses.

The PhD program in Economics will require a minimum of 48 credit hours of coursework plus a minimum of 21 hours of dissertation work.

The demand for our graduates has been strong and to date, all have been placed in academic, government or economic research organizations (see Appendix B) in Florida and elsewhere. We expect the demand for our PhD graduates to continue to be strong (see section II A & B).

B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at <a href="http://www.flbog.org/StrategicResources/">http://www.flbog.org/StrategicResources/</a>)

The proposed program directly supports the following:

- Goal 1: Access to and production of degrees (A3: production of Professional degrees and A4: emerging technology doctoral degrees). As the proposed program is an established doctoral program that will transfer from the College of Business to the College of Arts and Science, there will be no interruption in degree production. With the addition of new faculty as part of the transfer of the program, PhD degree production in economics will increase over time. With an emphasis in health economics this program aligns with the need for new PhDs in the emerging area of health care economics
- Goal 2: Meeting statewide professional and workforce needs B4 (economic development:

high wage/high demand jobs). With a research emphasis in health economics along with strengths in urban/regional economics and international economics, the PhD graduates will help meet the statewide need for expertise supporting areas identified for programmatic strategic emphasis by SUS (Nov. 2008).(Also see section II.A)

- Goal 3: Building world-class academic programs and research capacity. The goal of the proposed PhD program in Economics is to be ranked among the top 100 US Economics Departments within the next 10 years. The proposed Program is also consistent with USF's aspiration to be invited to join the AAU as every AAU university has an Economics Department ranked among the top 100 in the US. The focus on Health Economics is consistent and supports USF's signature educational and research thrust: *Healthy Communities: A Global Challenge* as the Program's teaching and research activities will contribute to the solution of global health challenges, such as HIV/AIDS, malaria, and tuberculosis, as well as domestic health issues such as diabetes, neurological diseases, and cancer). The program currently has several nationally and internationally recognized economics scholars (i.e., Apouey, Bellante, DeSalvo, Gyimah-Brempong, Loewy, and Picone) and its graduates are going on to successful careers (see Appendix B).
- Goal 4: Meeting community needs and fulfilling unique institutional responsibilities (see also section IIC for statewide program comparison). The rapidly growing health care and biotechnology sectors in the Tampa Bay area and I-4 Corridor more generally will benefit from the expertise in health care economics and urban/regional economics.

In addition to matching the BOG goals, the Department of Economics is fully aligned with USF's strategic plan. The proposed PhD program based on the strengths detailed above directly supports three out of four University strategic goals. These are:

- 1. Expanding world-class interdisciplinary research, creative, and scholarly endeavors
- 2. Promoting globally competitive graduate programs that support interdisciplinary inquiry, intellectual development, knowledge and skill acquisition, and student success through a diverse, fully-engaged, learner-centered campus environment.
- **3.** Expanding local and global engagement initiatives to strengthen and sustain healthy communities and to improve the quality of life.

The proposed program also meets the Strategic Guidance on new doctoral programs in that it is consistent with institutional missions and statewide goals, is in one of the BOG targeted areas of economic emphasis, is in high demand from students and employers, is non-duplicative, and involves no additional costs. See Item VI A for more information.

#### **INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY**

#### II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed

### program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

In its June 2009 report "The Economic Case for Health Care Reform," the Council of Economic Advisors reported that health care currently accounts for 18% of US GDP. The report also states that if these costs continue to grow at their historical rates, then health care will account for 34% <http://www.whitehouse.gov/assets/documents/CEA Health of US GDP by 2040. Care Report.pdf> Therefore, there is a need to improve efficiency in the allocation of health resources as a means of both reducing cost while providing the best health care for Americans. Health economics, a specialization in economics that is concerned with the economic analysis of health care, has become a very hotly demanded area of study in economics. In 2009, health economics was the only specialty in which job availability exceeded the number of candidates, according to the American Economics Association. The emerging shifts in national health care reform and the need to resolve the inherent tension between quality of care and cost of care point to a likely continuation of the need for more graduates to be produced in this specialty.

Health care consumes a large proportion of public (government) resources; hence a better understanding of government financing and its allocation (Public Economics) is necessary. To effectively analyze health care from an economic point of view, researchers need to understand how the health care industry is organized (Industrial Organization). In an increasingly global environment, health care economics cannot be understood in isolation.

The large expenditure of government resources on health care in the US has not brought about the best possible health outcomes to American citizens. The World Health Organization (WHO) ranks the US as  $32^{nd}$  among all countries in health outcomes even though it is number one in health expenditure per person. The relatively large share of GDP spent on health care, the relatively low health outcomes, and the expected increase in health care cost suggest the need to find ways to use health care resources more efficiently. The proposed program will benefit the state as its research efforts and graduate education provide inputs into policies to improve efficient utilization of health care resources.

In the State of Florida, where the elderly population is relatively large, the expected increase in health care expenditure is likely to be larger than the national average. Health care in Florida is a large enterprise because of the state's elderly population. Currently, the state spends about 20 percent of its expenditures on health care and a significantly large proportion of the state's gross product derives from health care. These ratios are going to grow as the size of Florida's aging population increases. The health care burden in Florida is evidenced by a projected \$1.38 billion budget deficit attributable to the Medicaid budget for the 2010/2011 budget cycle. With increased health care demand and decreased resources, it is important that the state allocates its health care resources efficiently. The proposed program will benefit the State of Florida as its research programs and graduate education provide inputs into policies to improve efficient utilization of health care resources. The program will also help the state as it brings in competitive federal research grants to the state, trains a highly skilled, highly paid workforce and produces scholarship that will better inform health care planning, policy and programming in Finally, it is important to note that 6 out of the 11 graduates of the program are Florida. employed in the state indicating the majority of our graduates stay and work in Florida, thus benefiting the state.

About 90% of jobs for economists are posted in various issues of the American Economics Associations publication, *Job Openings for Economists* (JOE) annually. According to the Annual

Reports of the Director of JOE, between 1999 and 2008 (the latest year statistics are available, new jobs for economists grew from 2389 to 2914, 22% growth while the annual supply of new economics PhDs in the US increased from 928 to 970, barely a 5% percent increase. During the same period, new jobs for Health Economists increased by 75% from 202 to 353. ("The Report of the Director, JOE", *American Economic Review*, May, various years) while the supply of new health economists increased from 54 in 1999 to 76 in 2008, an increase of 41% (*Journal of Economic Literature*, December, various years). While the number of jobs per newly graduated Economics PhD increased from 2.6 to 3 for all economists during the period, the number of jobs per new Health Economists, there is an even more severe shortage of health economists. There is evidence that the shortage of health economists will continue for the foreseeable future.

The Annual AEA survey results are consistent with a study by Cawley and Morrisey (2007) who find that in 2006, academic health economists, on average, earn more than non-health economists in all departments, whether in Colleges of Arts and Sciences, Business, Public Health, or Medicine. The paper also finds that health economists with a PhD in Economics, on average, earn at least \$15,571 more than health economists with other academic doctorates. This difference persists whether one considers positions in academia, the private sector, government, or international organizations. The AEA surveys and the Cawley and Morrisey paper suggest that the proposed PhD Program in Economics will fill a need as well as bring high wage/high demand jobs to the graduates of this program, consistent with SUS Goal 2.

Besides research in health, there is the need to build up the Professoriate in the academy. The two studies above show a glaring shortage of PhD economists in general and those specializing in health economics in particular. In the past, the US has filled the gap between demand and supply with foreign-born and -trained economists. And as Professors of the baby boom generation retire from the academy, the shortage of trained economists will be exacerbated. The proposed PhD program in Economics will partly help fill the need for health economists in the state of Florida and the Tampa Bay region.

The existing Economics track in the PhD in Business Administration has graduated eleven doctoral students, eight of whom specialized in health economics. All of these graduates, especially the health economics graduates, have had no difficulty finding jobs in academia, as researchers in large government health research organizations, or as research economists in the private sector. Six out of the eleven graduates are employed in Florida.

## **B.** Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

Since implementing the Economics track in the Business Administration doctoral program ten years ago, the program has had a tremendous response from highly qualified applicants. In the last five years, the program has averaged approximately 12 applicants per year of which we have accepted on average 50% and enrolled 75% of those who were accepted. We have attracted students both regionally, nationally, and internationally. We have managed our intake to fit the number of available doctoral fellowships and the limited size of the department's faculty. We have been successful in attracting students without advertising. The applicant pool from which we have drawn, and will continue to draw on as well as expand upon, is large and diverse, and originates in several regions of the world including Florida, other states in the US, and

international locations (see Appendix A). The international component of our applicant pool and admissions is consistent with the University's strategic goal of promoting globally competitive programs and preparing students to be successful in the global marketplace.

As indicated in Section 1 (B) above, the Doctoral Program in economics is consistent with the BOG's strategic goals A3-A4, B4, and C. In particular, the Program is consistent with the BOG's strategic goals of training graduates in critical needs areas of health professions, economic development in emerging technologies, high wage/high demand jobs, and globalization. The Program is also consistent with USF's strategic goal of promoting globally competitive programs through the inclusion of international/development economics as supporting fields. The Department encourages students to conduct research both in the US and abroad.

The program has graduated 11 students since the economics track of the PhD degree in Business Administration was implemented. Appendix B shows the placement of our graduates and where they are in their current careers. Of the 11 graduates from our program, only one has chosen not to look for a full time job. The data in Appendix B show that our graduates have done well in business, industry and academia. Six out of the 11 graduates are employed in Florida. Out of the 11 graduates, eight specialized in Health Economics. Out of these eight, three are employed in traditional economics departments in US universities, 3 are employed as research economists in the private sector, 1 is employed as a researcher at the US Centers for Disease Control, and one is employed as a senior research economist at the Central Bank of Thailand. The placement of our graduates clearly indicates that the program trains students to take positions comparable to those of PhDs from traditional economics programs as opposed to those who may be trained in Public Health or Health Policy. We believe this will help attract high quality students to the program.

C. If similar programs (either private or public) exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of any communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). Provide data that support the need for an additional program.

Economics doctoral programs exist at the University of Florida (UF), Florida State University (FSU), the University of Central Florida (UCF), Florida International University (FIU), and the University of Miami (UM). The doctoral programs at UF, UCF, and UM are offered through their respective Colleges of Business Administration, FSU offers its doctoral program through the College of Social Sciences, and FIU offers its doctoral programs on general economics with no particular area of specialization. UCF focuses on environmental and natural resources while FIU's doctoral program focuses on political economy and Latin America. USF's proposed program is distinctive in that it is the only one that emphasizes health economics as one of three areas of emphasis; thus it complements other programs delivered across the state and provides an opportunity for Florida to retain highly qualified students who might otherwise choose a program outside the state.

D. Use Table 1 (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale

## underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

See Table 1B. The enrollment projections are based on past experience in the doctoral track in the PhD in Business Administration. Enrollments in the program have been increasing at the rate of two students per year for the last five years. In the fall of 2009, there were 24 students enrolled and we use this as the baseline for future enrollment projections. It is expected that the program will become more competitive and continue to grow within its resources as a result of its placement in the academic core of the College of Arts and Sciences. The proposed PhD in Economics is likely to attract larger numbers of qualified students because it offers a broader scope of options for graduate study, research, and eventual employment.

# E. Indicate what steps will be taken to achieve a diverse student body in this program, and identify any minority groups that will be favorably or unfavorably impacted. <u>The university's Equal Opportunity Officer should read this section and then sign and date in the area below.</u>

The Department of Economics is committed to the principle of equal education and employment opportunities without regard to race, color, marital status, sex religion, national origin, disability, age, Vietnam or disabled veteran's status as provided by law and in accordance with the University's respect for personal dignity. The current student and faculty and graduate student population is diverse see Table 4. However the department continues its efforts in this area as over the past five years, departmental representatives have attended special minority recruitment forums promoted by USF's graduate school, economics professional organizations and DOCNET (<u>http://www.businessdoctoralprograms.org/</u> a consortium for recruiting to PhD programs in business that serve as recruitment avenues for under-represented groups. We anticipate continued participation in such programs and efforts to maintain a diverse graduate faculty and student population.

Equal Opportunity Officer

Date

#### III. Budget

A. Use Table 2 to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

Table 2 shows the cost for the proposed program whose departmental home was transferred in July 2008 from the College of Business to the College of Arts and Sciences. The total E&G cost per year for the PhD program is projected to be \$418,182. This represents the portion of the total departmental budget that supports the PhD program. The bulk of existing program fundingis for faculty salaries with the remainder allocated to staff, graduate assistantships and a small expense budget. **No new resources will be required for this program** as the resources supporting the full range of departmental functions (BA, BS, MA, PhD, and general education courses) were

transferred with the department and program from the College of Business (shown in Table 3) to the College of Arts and Science. The proposed budget shows a projected increase by year five to reflect the expected increase in number of faculty. Projected growth in the number of faculty in the department will come from a combination of retirements in the department, reallocation of lines within the college and university, and from new tuition revenues and private giving. All additions will be based on the department's productivity and contributions to reaching University and BOG strategic goals

B. If other programs will be impacted by a reallocation of resources for the proposed program, identify the program and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

As the proposed program has been in existence within the department (as a track in the PhD in Business Administration) for the past ten years, we do not foresee any negative impact of the proposed free-standing program on other activities in the Department. On the other hand, in our new environment, we foresee increased opportunities for undergraduates in the Economics department to participate in faculty research within the College of Arts and Sciences.

## C. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

Perhaps the most important benefit of the proposed program is the change in orientation of the Department's teaching and research. In the College of Business, the Department's research and teaching focus was on business and financial issues, a focus that is consistent with the mission of a College of Business but is nevertheless constraining for economists. As a result, the Department partnered with business disciplines, such as Accountancy, Finance, Marketing, and Information and Decision Sciences, among others. A lot of the issues that economists deal with (including health) are social and political, rather than business issues. Thus, establishing a new PhD Program in Economics in the College of Arts and Sciences will allow the Department to focus on the core issues economics deals with and collaborate with other social sciences departments in this effort.

One of the exciting and important assets of the University of South Florida is USF Health and its Colleges of Medicine, Public Health, Nursing, and the associated Moffitt Cancer Center and the Byrd Alzheimer's Research Center. USF is also home to the FCoEBITT (Florida Center of Excellence in Biomolecular Identification and Targeted Therapeutics). The College of Arts and Sciences forms the intellectual bedrock for USF Health as the provider of the basic sciences (Biology, Chemistry, Psychology, etc) on which much of the research and teaching in USF Health depend. Housing the proposed PhD program in Economics in the College of Arts and Sciences will allow Economics to collaborate with these disciplines to advance the future of health care development in Florida and the US in synergistic ways that would be much more difficult to accomplish if the Economics doctoral program remained focused in the Business

Administration disciplines.

The proposed program requires students to take courses outside the Economics Department so this will lead to an increased demand for graduate courses and opportunities to increase SCH productivity in other departments. It will also help to deepen the collaboration of Economics with the Department of Mathematics as PhD students in Mathematics will take more courses in microeconomic theory and econometrics. It will also help Economics students sharpen their mathematical skills. The move of Economics to the College of Arts and Sciences will also strengthen a proposed collaboration with the Department of Psychology. The Department of Economics will continue to provide service courses (such as Microeconomics, Econometrics, International Trade) to PhD students in Business Administration and other programs. This means that its move to the College of Arts and Sciences will allow it to extend services to other programs without reducing the services currently provided to the College of Business.

The location of the proposed program within the College of Arts and Sciences will provide opportunities for research collaborations for both faculty and students. The Department recruits several of its PhD students from its own MA program who in turn are recruited from its undergraduate programs. This recruitment effort improves the quality of both the MA and undergraduate programs as students strive to be selected to continue to the next level. Since Business students are more inclined to pursue an MBA rather than a PhD in Economics, the move to the College of Arts and Sciences and the creation of the proposed free-standing program will allow the Economics Department to focus on advancing students through its own discipline.

Economics PhD students are required to teach undergraduate courses as part of their training. Expanding the PhD program through the move to CAS will allow the PhD students to interact more with undergraduate and MA students, further improving undergraduate and Master's student outcomes. Undergraduates and Master's students will be encouraged to participate in the PhD students' "brown bag" seminar series in the department thus improving the research and presentation skills of Master's and undergraduate students. Besides inspiring undergraduates and Master's students to increase their performances, the PhD Program in Economics will decrease the average cost of producing student credit hours (SCH) as doctoral students cost less than some adjuncts.

**D.** Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

Over the last five years the Department of Economics has brought in over \$600,000 in research awards from a variety of sources including National Institutes of Health, the National Science Foundation, and sources in the private sector. Funding has supported such projects as "Hospital Volume and the Quality of Care", "Globalization, Migration and the US Labor Market for Physicians", "Determinants and Consequences of Alcohol Consumption", and "Visual Impairment: Treatment and Effects on the Elderly". In addition, there is a joint submission (with researchers from the College of Behavioral and Community Sciences) to the Agency for Health Care Research and Quality requesting 1 million dollars to support the research project, "Clinically Enhanced Multi-Purpose Administrative Dataset for Comparative Effectiveness Research in the State of Florida". The external funding will continue to increase as the new hires establish externally funded research programs. This funding will allow the PhD program to grow without additional internal resources for graduate student support.

#### **IV.** Projected Benefit of the Program to the University, Local Community, and State

Use information from Table 1, Table 2, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

Health care in Florida is a large enterprise because of the state's growing elderly population. Currently, the state spends about 20 percent of its expenditures on health care and a significantly large proportion of the state's gross product derives from health care. These ratios are going to grow as the size of Florida's aging population increases. The health care burden in Florida is evidenced by a projected \$1.38 billion budget deficit attributable to the Medicaid budget for the 2010/2011 budget cycle. With increased health care demand and decreased resources, it is important that the state allocates its health care resources judiciously and efficiently. The proposed program will benefit the State of Florida as its research programs and graduate education provide inputs into policies to improve efficient utilization of health care resources. The program will also help the state as it brings in federal research grants to the state, trains a highly skilled, highly paid workforce and produces scholarship that will better inform health care planning, policy and programming in Florida. In addition, the program will also attract international students who will pay their way to help to support the program. Finally, it is important to note that six out of the 11 graduates of the program are employed in the state indicating the majority of our graduates stay and work in Florida, thus benefiting the state. The proposed PhD program with its research focus on health care research will enhance the profile of the Tampa Bay region and the I-4 corridor as an area of health research in the state and the southeast.

The United States currently spends about 18% of its Gross Domestic Product (GDP) on health care and the President's Council of Economic Advisors has projected that this share will rise to over 34% by 2040 if current trends continue. <a href="http://www.whitehouse.gov/assets/documents/CEA\_Health\_Care\_Report.pdf">http://www.whitehouse.gov/assets/documents/CEA\_Health\_Care\_Report.pdf</a> In the State of Florida, where the elderly population is relatively large and continues to grow, the expected increase in health care expenditure is likely to be larger than the national average. The large expenditure has not brought about the best possible health outcomes to American citizens. The World Health Organization (WHO) ranks the US as  $32^{nd}$  among all countries in health outcomes even though it is number one in health expenditure per person. The relatively large share of GDP spent on health care, the relatively low health outcomes, and the expected increase in health care cost suggest the need to find ways to use health care resources more efficiently. The proposed program will have a national benefit as its research efforts and graduate education can have an impact on national health policy to improve efficient utilization of health care resources.

The proposed program will benefit the University of South Florida, the local community, and the State of Florida through its research and teaching effortsby contributing to economic development, by the production of graduates who are likely to be in high demand, and by building a world class academic program in health economics, a focus that not only addresses the needs of an aging population in Florida, but also the health needs of the world.

The benefit to students is that, traditionally, graduates with a PhD in Economics have fared better in the economics job market than those with PhD in Business with a concentration in Economics

(see II.A, par. 6 and 7). The proposed PhD Program in Economics will therefore give graduates of the program a competitive advantage in the job market. Finally, implementation of the proposed program will benefit USF itself. Economics most appropriately belongs in the academic disciplinary core, usually the College of Arts and Sciences, of any university. An Economics track in a Business PhD (or any Professional degree program) restricts the ability of an Economics program to be a foundational part of the academic enterprise of the university. The proposed program will allow Economics to collaborate with other sciences and social sciences in the College of Arts and Sciences to enhance the intellectual foundation of the university. As shown in tables 2 and 3, this will be done at no additional cost to the state and may actually decrease the cost to the university of producing SCH.

#### V. Access and Articulation – Bachelor's Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a request to the BOG for an exception along with notification of the program's approval. (See criteria in BOG Regulation 6C-8.014)

List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see Common Prerequisite Manual <u>http://www.facts.org</u>). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access."

NA

**B.** If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

NA

B. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that community college transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and

criteria for Limited Access are identified in BOG Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

NA

C. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see Statewide Articulation Manual <a href="http://www.facts.org">http://www.facts.org</a>). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

NA

#### **INSTITUTIONAL READINESS**

#### VI. Related Institutional Mission and Strength

### A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan.

The goals of USF's strategic plan include: (i) expanding world-class interdisciplinary research, (ii) promoting globally competitive undergraduate, graduate and professional programs, (iii) expanding local and global engagement initiatives to strengthen and sustain global healthy communities and improve the quality of life, and (iv) enhancing all sources of revenue. The proposed program is consistent with all these goals. Faculty research and publications have contributed to goals (i) and (iii), our teaching and student research have contributed to goals (i) and (ii), our teaching and student research have contributed to goals (i) and (ii) as our students have already published in areas as diverse as urban traffic congestion in the US, problems of labor market participation in Latin America, the price effects of regulation of pharmaceutical markets in Europe, and the effects of malaria on school outcomes in Africa. Our faculty has contributed to goal (iv) by winning external research grantsthat also support doctoral fellowships.

## **B.** Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The University of South Florida has a very large world-class health program that includes the Colleges of Medicine, Public Health, Behavioral and Community Sciences, and Nursing. In addition, USF houses the Moffitt Cancer Center and the Byrd Alzheimer's Research Center. The Economics program takes advantage of the strengths in USF Health and the College of Behavioral and Community Sciences in Academic Affairs. Economics faculty work with faculty from the various colleges of USF Health through collaborative research, faculty from USF Health departments serve on Economics doctoral dissertation committees, and some faculty members from the USF Health colleges have courtesy appointments in the Department of Economics. We hope to have joint hires with some of these colleges in the future. In addition to the health programs, the department also has strong relationships with the Department of Finance in the College of Business and the Department of Mathematics and Statistics in the College of Arts and Sciences as our students take some of their courses in these two departments and their students take courses in ours. In addition, the Department plans to work with the Byrd Alzheimer's Research Center on campus and the Departments of Anthropology (medical anthropology) and

Africana Studies (Health Disparities), and Government and International Affairs (home to the newly implemented PhD in Government) in the College of Arts and Sciences. All these units at USF are strongly supportive of the proposed PhD Program in Economics.

#### C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology (table) of activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

The doctoral program in Economics currently exists as a track in the PhD in Business Administration. With the Economics Department's move to the College of Arts and Sciences, it is necessary to establish the degree as a free-standing program aligned with the mission, goals, and priorities of the College of Arts and Sciences and the University of South Florida. The planning and approval process for this program was in accordance with USF Policy 10-036 on approval of new academic degree programs.

The Economics Ph.D. Proposal was submitted, reviewed and approved by the College of Arts and Sciences (CAS) Graduate Committee on **September 21, 2009**. It was sent to the University Graduate Council for consideration.

The proposal was considered by the University Graduate Council on September 23, 2009 and approved with revisions on **October 22, 2009**.

On **October 22, 2009**, the revised proposal to the Graduate Council was passed and approved to advance to the Academic Affairs Management Council.

On **October 26, 2009,** the proposal was presented to the Academic Affairs Management Council by Dean Karen Liller. The members approved advancement of the proposal to the USF BOT/ACE workgroup in November.

On **November 19, 2009** the proposal was presented to the USF Board of Trustees Academic and Campus Environment Work Group (BOT/ACE). The proposal was approved unanimously to be submitted to the full Board of Trustees.

The PhD in Economics was presented to the USF Board of Trustees on **December 3, 2009.** The BOT unanimously approved the submission to the BOG of the proposal for the Ph.D in Economics

#### VII. Program Quality Indicators - Reviews and Accreditation

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

In 2004, a panel of experts made up of Professors T. Paul Schultz of Yale University and Professor Peter Kuhn of University of California, Santa Barbara, evaluated the Economics concentration of the PhD in Business degree (see Appendix C). The conclusion was that the program was doing very well. However, the panel recommended: (i) substantially increasing the

number of faculty, (ii) substantially increasing the number of PhD fellowships, (iii) reducing teaching requirements of doctoral students, (iv) narrowing the areas of specialization, and (v) strengthening the theoretical preparation of students.

The Department has addressed these issues in the following way:

- There has been a net increase in faculty size by one. However, as a result of retirements and other changes, the department has hired four new faculty members in the last four years. With more modern training than the ones they replace, the department has made a great leap in improving its graduate faculty. Two of these faculty members were hired since the Department moved to the College of Arts and Sciences.
- Reduced teaching requirements of doctoral students by 50% since the review.
- Introduced two graduate courses---Mathematical Economics II and Game Theory---to strengthen the core theory sequence. These courses are taught by new faculty. There are currently 8 teaching assistantships available for PhD students. An additional PhD stipend will be available fall 2010.

Graduates of the proposed doctoral program are expected to be proficient in advanced economic theory, econometrics and applied research, especially in the areas of health and public policy. Students will be trained to take positions in academia, government, research organizations, as well as the private sector.

We will judge the quality of the Program on several qualitative and quantitative dimensions. Among these are: (i) initial placement of our graduates, (ii) publication record of our graduates (iii) rankings among Economics Departments, (iv) faculty publications, (v) ability to attract external research grants (v) time to degree and (vi) number and quality of applicants to the program.

Program Assessment: The quality and success of the proposed program will be assessed in two ways. First, we will use the internal USF Program Outcome Assessment instrument administered by the university, to evaluate our program annually. In collaboration with the College and the Graduate School, the Department will rectify deficiencies and seek continuous quality improvements.

In addition to internal evaluation, as part of the Academic Programs Review Process, the Department will use a committee of outside experts, similar to the 2004 committee to evaluate the program on a periodic basis. The Department will implement the recommendations of such a committee to improve the quality of the program.

#### •

#### **Program Administration**

The program is administered at three levels. At the departmental level the program is administered by the Graduate Policy Committee comprised of elected faculty from amongst the graduate faculty. The department chair serves as an ex-officio member of this committee. The daily administration of the program is the responsibility of the Director of Graduate Programs, a member of the graduate faculty who is assisted by a part-time assistant. The Director of Graduate Programs serves as chair of the department's Graduate Policy Committee. In addition to these,

the department also has a placement officer to advise students on labor market issues and practices. This position rotates among the faculty.

The next level of program administration is the College-level Graduate Program Committee that must approve all courses and curricula and program changes as well as ensure program quality and provide appropriate support and guidance. At the College level an Associate Dean for Academic Affairs and the Dean of the College are responsible for administration of all academic degree programs. The ultimate level of authority and administration of the program is at the University level which jointly with the College committee monitors program quality through the University's internal evaluation program. The Provost, as chief academic officer, is the administrator responsible for program quality at the institutional level.

#### VIII. Curriculum

### A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

The student learning outcomes for the program are based on standards established by the American Economic Association (AEA) and benchmarked against the Top 30 Economics Departments in the USA. Graduates of the program will:

- 1. Demonstrate in-depth knowledge of the field of Economics.
- 2. Demonstrate the ability to select and apply theoretical and practical research skills appropriate to Economics.
- 3. Demonstrate the ability to make significant independent, original intellectual contributions that will expand the field of Economics, and.
- 4. demonstrate teaching skills appropriate for employment in higher education. (For students who intend to pursue a career in research and teaching )

Graduates of the proposed doctoral program are expected to be proficient in advanced economic theory, econometrics and applied research, especially in the areas of health and public policy. Students will be trained to take positions in academia, government, research organizations, as well as the private sector.

We will judge the quality of the Program on several qualitative and quantitative dimensions. Among these are: (i) initial placement of our graduates, (ii) publication record of our graduates (iii) rankings among Economics Departments, (iv) faculty publications, (v) ability to attract external research grants and (v) number and quality of applicants to the program.

#### **B.** Describe the admission standards and graduation requirements for the program.

To be admitted to the doctoral program, a student must meet the following minimum requirements:

- 1. Bachelors degree or equivalent from a regionally, nationally accredited university or international equivalent.
- 2. Have a GPA of 3.0 (B) or better in all upper division undergraduate classes.
- 3. Take a graduate admissions test within the preceding 5 years with minimum scores of 500 (V) and 660 (Q) on the GRE and 575 on the GMAT.
- 4. A minimum of 2 courses in calculus, a minimum of 1 course in probability and statistics, and intermediate-level microeconomics and macroeconomics. Applicants must earn a grade of B or better in each of these courses.

To graduate from the doctoral program, a student must meet the following minimum requirements:

- 1. Complete 27 credit hours of required coursework with the required GPA.
- 2. Complete 12 credit hours of economics field coursework with the required GPA.
- 3. Complete 9 credit hours of secondary field coursework with the required GPA.
- 4. Pass the qualifying examinations in mathematical economic/microeconomics and econometrics.
- 5. Write and successfully defend the doctoral dissertation proposal.
- 6. Complete at least 21 credit hours of dissertation coursework.
- 7. Write and successfully defend a doctoral dissertation.
- C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

The PhD program is comprised of a minimum of 69 credit hours.

*Core Courses* (27 Hours)

ECO 6405 Mathematical Economics I (3) ECO 7406 Mathematical Economics II (3) ECO 6115 Microeconomics I (3) ECO 7116 Microeconomics II (3) ECO 6206 Aggregate Economics (3) ECO 6424 Econometrics I (3) ECO 6425 Econometrics II (3) ECO 7426 Econometrics III (3) ECO 6305 History of Economic Thought (3)

*Fields* (12 hours) select two pairs from the groupings below:

ECP 6536	Economics of Health Care I (3)
ECP 7537	Economics of Health Care II (3)
ECS 6015	Economic Development (3)
ECO 6706	International Trade: Theory and Policy (3)
ECP 6405	Industrial Organization (3)

ECP 7406	Industrial Organization II (3)
ECO 6505	Public Finance (3)
ECO 6525	Public Sector Economics (3)
ECP 6614	Urban Economics (3)
ECP 6624	Regional Economics (3)

*Electives* (9 hours)

Three-course secondary field outside of economics

Dissertation (21 hours minimum) ECO7980 Dissertation

A PhD program in economics generally begins with a set of core courses in economic theory and empirical methodology. This is followed by a set of two-course fields of specialization and dissertation research in the field of specialization. USF's proposed PhD program in Economics follows this tradition with a set of two-course fields of specialization in Health Economics and other fields. However, what is unique about the proposed program is that all other fields are developed to support and strengthen the Health Economics specialization. Thus, while the program has only two courses in Health Economics, it provides an in-depth analysis of health care economics through a combination of health economics and the other support fields. Copies of current syllabi of the two Health Economics courses and a sample copy of one other field course (Industrial Organization) are attached (Appendix D) to show how they are inter-related. It must be noted that the content of a course syllabus will change over time as the emphasis in the field changes.

### **D.** Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

<u>Fall Year 1</u> ECO 6405, Mathematical Economics I ECO 6115, Microeconomics I ECO 6424, Econometrics I

Fall Year 2 ECO 6425, Econometrics II Field Support

Fall Year 3 Field Support Elective

Year 4 Dissertation

Year 5 Dissertation Spring Year 1 ECO 7406, Mathematical Economics II ECO 7116, Microeconomics II ECO 6206, Aggregate Economics

<u>Spring Year 2</u> ECO 7426, Econometrics III Field ECO 6305, History of Economic Thought

<u>Spring Year 3</u> Field Support Elective It is understood that students will complete the degree program in no more than 7 years.

#### E. Provide a one- or two-sentence description of each required or elective course.

Microeconomics I (ECO 6115) – Microeconomic behavior of consumers, producers, and resource suppliers, price determination in output and factor markets, general market equilibrium.

Microeconomics II (ECO 7116) – Topics in advanced microeconomic theory, including general equilibrium, welfare economics, inter-temporal choice, uncertainty, information, and game theory.

Aggregate Economics (ECO 6206) – Advanced macroeconomic analysis of income, employment, prices, interest rates and economic growth rates.

History of Economic Thought (ECO 6305) – Currents of modern economic thought in the last hundred years.

Mathematical Economics I (ECO 6405) – Mathematical models of optimizing behavior and economic equilibrium.

Mathematical Economics II (ECO 7406) – Advanced Mathematical techniques, dynamic processes, set theories and fixed point theorems.

Econometrics I (ECO 6424) – Theory and use of multiple regression to estimate relations in causal models, use of standard software packages.

Econometrics II (ECO 6425) – Advanced econometric techniques: model building, estimation and forecasting, design and execution of research projects.

Econometrics III (ECO 7426) – Advanced Econometrics with emphasis on panel data and applications to data.

#### F. For degree programs in the science and technology disciplines, discuss how industrydriven competencies were identified and incorporated into the <u>curriculum and identify</u> <u>if any industry advisory council exists to provide input for curriculum development and</u> <u>student assessment.</u>

Because Economics graduates are employed in several industries, there are no specific industry driven standards to guide curriculum development in this field. As a result, the proposed program does not have an industry advisory council. However, the Department of Economics has an advisory council to help it raise resources to support academic programs, although the council was not intended, and has not been used, to shape the Department's curriculum. For curriculum guidance and quality benchmarking, the Department relies on what the American Economic Association (AEA) deems important for doctorate doctoral curriculum in Economics as well as standards from the top 30 Economics Departments in the USA.

When the proposed Economics PhD program is approved, the Department intends to expand the advisory council and revise its charge. Specifically, we will expand the Council to include members from the Health Care industry and academe as well as revising its charge to include

advice on curriculum issues.

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.

There is no accreditation agency or learned society concerned with PhD programs in Economics. USF will not be seeking accreditation for the proposed program.

#### H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?

The Department of Economics offers two undergraduate degrees: the BS in Economics awarded by the College of Business, and the much larger BA in Economics awarded by the College of Arts and Sciences. The College of Business is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB), and the BS in Economics program is included under this college accreditation. The BA in Economics, like other undergraduate social science programs in the College of Arts and Sciences, has no programmatic or disciplinary accreditation. The MA program is currently awarded by both colleges and also falls within the AACSB accreditation of the College of Business. After the approval of the proposed doctoral program, the MA program will move to the College of Arts and Sciences .

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses; distance/distributed learning technologies, and joint-use facilities for research or internships.

The program relies on traditional delivery mode on the Tampa campus. There are no plans to collaborate with other universities or to deliver the PhD program online.

#### IX. Faculty Participation

A. Use Table 4 to identify existing and anticipated ranked (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).

See Table 4.

**B.** Use Table 2 to display the costs and associated funding resources for existing and anticipated ranked faculty (as identified in Table 2). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

See Table 2. The initial cost/funding is derived from the current budget of the department of Economics that was transferred with the department from the College of Business to the College of Arts and science (see Table 3). The Economics department budget supports the full range of research and teaching activities (BA, BS, MA, PhD, and general education courses).

### C. Provide the number of master's theses and/or doctoral dissertations directed, and the number and type of professional publications for each existing faculty member (do not include information for visiting or adjunct faculty).

Faculty Name	Theses	Dissertations	Professional Publications
Bénédicte Apouey	0	0	3 refereed articles
Andrei Barbos	0	0	2 refereed articles
Yi Deng	2	2	5 refereed articles
Joseph DeSalvo	20	15	25 refereed articles, 1 book
Mark Herander	5	2	17 refereed articles, 1 book
K. Gyimah-Brempong	15	2	56 refereed articles, 6 book chapters
Bradley Kamp	3	2	8 refereed articles
Michael Loewy	6	2	12 refereed articles, 2 book chapters
Murat Munkin	2	2	9 refereed articles
Gabriel Picone	8	10	17 refereed articles, 1 book, 7 book chapters
Philip Porter	3	2	27 referred articles, 4 book chapters

**D.** Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

As the table in IX C above indicates, the faculty members involved in the program have been very productive in research; some have also have had their research funded by prestigious organizations such as the National Institutes of Health (NIH) and the National Science Foundation (NSF) as well as service to the community. In the past five years, all indices of faculty productivity have been trending upwards: For example, between 2004/2005 and 2008/2009, average per faculty SCH production in the department increased by about 21% (from 1,124 to 1351), the number of economics majors has increased by 123% (from 187 to 417) and graduation rate has increased by 15%. In terms of research, the table suggests that the department's faculty has been very productive. For example, Professor Gyimah-Brempong has published 12 papers in the last 5 years, Professor Munkin has published 6 papers in the last three years, and 5 faculty members have published at least 6 refereed journal articles each in highly reputable journals (See Appendix E). Professor Deng won the best journal article published in the International Journal of Industrial Organization Award in 2008 while Professor Apouey won the Young European Economist of the Year Award in 2009. In addition, Professors Bellante, Gyimah-Brempong, and Porter serve as Associate Editors on professional economics journals. Detailed compilation of faculty productivity in the last five years is attached as Appendix E.

#### X. Non-Faculty Resources

A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved for all doctoral level proposals.

The current library resources, including journals and data bases are adequate to meet the needs of the proposed doctoral program in economics.

## **B.** Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3.

We do not need additional library resources for the proposed program. (See Appendix F for information from Librarian).

Library Dean

Date

## C. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

We currently have six classrooms that, among other things, are used for PhD level classes in addition to an econometrics lab. There are also two larger auditoriums that the department shares with other departments for departmental research seminars. Each faculty has office space, a computer and access to the needed software to support his/her teaching and research. All doctoral students also share office space in the department. Each doctoral student has a dedicated computer and supporting software to work with. Each faculty member has access to a shared printer, a fax machine, and a copier.

D. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2. Do not include costs for new construction because that information should be provided in response to X (J) below.

No additional space of any kind is needed to implement or maintain the proposed program through Year 5. The Department anticipates moving to a new space it will share with the Department of Mathematics as soon as the new interdisciplinary science building being constructed on campus is completed. The move will further strengthen our collaboration with the department of Mathematics in the College of Arts and Sciences.

### E. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

Each faculty member and doctoral student has a PC and appropriate econometric software to conduct their research. The Department also has an econometric lab with two PCs and appropriate software for student research and homework.

F. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2.

None.

G. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2.

None.

H. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2.

The department has a total of 8 graduate assistantships at this time (\$150,000 Table 2) with an additional assistantship to begin fall 2010. By year five we expect the program to grow from 24 to 32 PhD students. This enrollment increase will be supported by three additional assistantships bringing the total assistantship budget to \$200,000. Additional student support will be generated from grants and contracts and private giving.

### I. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

PhD programs in economics generally do not require internship or practicum experiences. Occasionally, students writing dissertations may do some field work to collect data.

J. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

NA.

### PhD Applicant Data

Location	Apply	Admit	Enroll
Belarus	1	1	1
Bulgaria	1	1	1
China	10	3	2
Columbia	1	1	1
Costa Rica	1	0	0
Cyprus	1	1	1
Ghana	1	1	0
India	2	2	2
Kenya	1	1	1
Lebanon	1	1	0
Saudi Arabia	1	0	0
Turkey	4	1	1
United States			
FL	24	13	11
LA	1	0	0
ME	1	1	1
OH	2	0	0
PA	1	0	0
TN	1	1	0
Totals	55	28	22

#### **Appendix B: Placement Economics PhD Graduates**

#### **PhD Business Administration (Economics Track) Graduates**

*Josefa Ramoni* (2004), Department of Economics, Universidad dos Los Andes, Venezuela, Full Professor, tenured

*Wesley Austin* [Health] (2006), Department of Economics, University of Louisiana-Lafayette, Assistant Professor, tenure earning

Chanvuth Sanghai [Health] (2006), Research Economist, Monetary Policy Group, Bank of Thailand

*Barbara Caldwell* [Health] (2006), St. Leo University, Assistant Professor and Department Chair, Computer Information Systems, tenure earning

*Qing Su* (2006), Department of Economics, Northern Kentucky University, Assistant Professor of Economics, tenure earning

*Taiwo Abimbola* [Health] (2007), Research Economist, Global Aids Program Center for Disease Control (CDC)

*Aysegul Timur* [Health] (2007), Department of Economics, Hodges University, Ft. Myers, Associate Professor of Economics, tenured

Betty Rincon (2007), Adjunct Professor, Department of Economics, USF

*Christopher Jones* [Health] (2008), Florida Economic Advisors, President and Chief Economist, (Economic Consulting)

*Rui Dai* [Health] (2009), Milliman, USA, Senior Research Economist, Private Sector Healthcare Group)

*Finnie Cook* [Health] (2009), Deiter, Stephens, Durham, and Cook (Economic Consulting Firm), Senior Economist and Partner.

Marin Geshkov (2010) Just graduated and on the job market.

#### **Appendix C: Report of External Review Team**

The Economics PhD Program at the University of South Florida:

**Report and Recommendations** 

Prepared by:

Peter Kuhn, University of California, Santa Barbara T. Paul Schultz, Yale University March 19, 2004

This report summarizes our conclusions regarding the current and potential status of the economics Ph.D. program at USF. It is based on detailed conversations with faculty, graduate students and administrators during the course of our site visit, March 14-16, 2004, evaluated through the lens of our own experiences as academic economists over the past several decades in a number of universities across the country. We will address the questions posed to us in the provost's letter explicitly and in turn.

#### What is the Current Status of the Program?

The Economics PhD is a small, new program operated by the Department of Economics within the College of Business Administration. Formally, it is a PhD in Business Administration with an emphasis in Economics, though practically – with one important exception we discuss below—it follows the model of PhD instruction and thesis supervision that has become completely standard within the U.S. economics profession.

The program started in 1999, and graduated its first student in March 2004; based on the five-year normative time that is now the standard in economics, this rate of progress is right on track. Admitting an average of two or three students a year, the program has attained a size of 12, which will be approximately its steady-state size if the current level of funding and commitment to the program are maintained. The program offers five fields of specialization – labor, health, econometrics, urban/regional and public finance— wisely reflecting its strengths in empirical microeconomics. Overall, our impression was that the students were well trained and satisfied with the program, and that faculty was pleased to have a PhD program and eager to teach in it despite the extra workload. Properly nurtured, the program has significant upside potential to generate marketable graduates, and to attract and retain at USF faculty who would raise the university's national research ranking and raise significant extramural research funds. At the same time, the program currently faces some important stresses resulting from the low and diminishing level of resources allocated to it. Unless these stresses are alleviated soon it is possible that the program could quickly fall below the critical mass required to keep it viable.

The main sources of stress facing the department today are threefold. First, and most critically, the number of faculty (i.e. lines) in the department has fallen from 17 to 13 since the PhD program was instituted five years ago. Since a number of these instructors were active researchers, who are critical to the state-of-the-art instruction required in a doctoral program, this

represents a major blow to the department and program. Second, while faculty lines have shrunk, the number of undergraduate course units taught by the department has expanded dramatically. Most of this increase appears to have been absorbed in the form of larger classes and in the teaching of courses by graduate students and adjunct faculty. The amount of instruction expected of graduate students in the program strikes us as excessive by the standards of our profession and an impediment to timely completion of first-rate dissertation work. Third, the current requirements of the program mandate the students to complete what amounts essentially to a full extra year of coursework that is not required in any other economics PhD program of which we are aware: we refer to the sequence of M.B.A. courses in management, information systems, accounting, marketing, etc. that –with the exception of finance—are not relevant to an economics PhD In fact, given these last two barriers, we are very impressed by the timely completion of the department's first PhD this March.

#### Where Can the Program Go in the Near Future?

If the stresses identified above are at least partially alleviated, the department in the near future can expect to have a small, specialized PhD program that is credible by the standards of the U.S. profession, specializing in a few carefully-chosen areas of microeconomics that link naturally to other areas of strength at USF (in particular the school of engineering, via urban/regional economics and the school of health, via health economics), and producing graduate students with a good and up-to-date set of empirical skills who are readily employable in a number of settings. These settings include teaching colleges and universities; local, state, U.S. and foreign (particularly Latin American) governments; and both non-profit and for-profit research institutes worldwide. In the near future, these settings are unlikely to include tenure-earning positions at tier-one, research-intensive U.S. universities.

To accomplish these near-term goals, we offer a number of concrete suggestions, which should strengthen the program, including faculty hiring and retention strategy, the introduction of specific mechanisms to reward faculty for their research achievements, a set of curriculum and program changes which should improve the research capacity of the graduates and enhance their assessment of the program, and arrangements that could add to the pool of promising program applicants and thereby sustain the high student quality.

### What is the Program's Potential with Respect to Areas of Specialization, Interdisciplinary Linkages, and Partnerships?

The labor, health, and advanced micro-econometrics fields are the current core specialization areas in the economics PhD program and faculty in these areas are often split between two allied fields. Regional economics has lost a faculty, leaving only one person in the field. Public finance could also be strengthened. Several faculty and students indicated that more faculty teaching in international finance and/or development economics would be valued, given the fraction of students from low income countries, although Gyimah-Brempong's return from NSF may help revive this field. If there were additional faculty to teach and advise in econometrics, this would reduce the growing burdens of dissertation advising which now fall heavily on Picone and DeSimone. The program faculty should be in the best position to judge where new faculty are most urgently needed, but we would consider hiring individuals with several empirical micro-economic interests in the core areas of health, urban, labor, education, public finance, and international/development. The goal of having two faculty members in each field is a reasonable one to support dissertation students when individual faculty will periodically be on leave. With a reduction in the Department's lines from 17 to 13, while undergraduate and MA teaching requirements have increased, it is an achievement that the PhD students in the program expressed satisfaction with their training environment and access to faculty, although they worried that their key faculty would soon be overwhelmed with thesis advising as the program matured and the number of faculty diminished.

The creation of partnerships and interdisciplinary alliances to foster research and PhD training across a large university is a challenge for administrators. How can one reduce disciplinary barriers and funding restriction to such interdisciplinary training and research, and design suitable incentives to encourage the development of such networks that serve the research needs of faculty and graduate students? Two promising areas were evident to us. The regional and urban economics field currently benefits from coordinated activities and appointments with the Center for Urban Transportation Research, maintaining a joint masters program in Urban Regional Science. The health economists in the economics program could collaborate with researchers in the USF Medical School or with the health economist in Public Health where common problems are studied using parallel models, statistical methods, and data sources. Research on the problems in urban/transportation and health/aging is likely to benefit Florida directly at the state and local level, and high quality research will be widely recognized within the economics profession. A final partnership was noted within the College of Business Administration, in which the Center for Entrepreneurship has brought together econometric modelers who can analyze business-oriented data on pharmaceuticals, FDA approval of drugs, and the valuation of these property rights as subsequently reflected in rising stock prices.

#### What is Needed to Reach the Potential for this PhD Program and How Long will it Take?

First and foremost the program needs more research faculty at the new PhD level or in mid career. Two new lines are needed, and the faculty in the PhD program should assess their field priorities. One new faculty might be in health economics, with interests in applied micro economic analysis of health care and perhaps the behavior of the elderly. Another appointment might be in regional, urban, or educational economics, or time series and panel econometric methods.

Second, the faculty who will create a prestigious Economics PhD program are interested in undertaking influential research and they must be convinced that USF will find a way to reward their research activities and associated PhD training. The Chair of the Economics Department should survey what salary and working conditions peer research institutions are offering to comparable faculty and communicate these market conditions to College administrators and the Provost. It is critical to be flexible in approximately matching outside opportunities, in both financial terms and in reduced teaching loads when individuals are first hired. Providing new faculty with modest research "seed "funds is also common, which they can spend on computers, data, justified travel and research assistance.

Then the administration should encourage the Chair to evaluate and nominate faculty to receive additional salary bonuses for exceptionally high quality research publications. Without such recognition, successful research economists will soon have higher offers at other institutions and it may then be too late to match their outside offers to prevent them from leaving USF. An institution that wants to raise its research profile must try to retain research faculty who play a key role in mentoring PhD students. Dean Anderson indicated that a proposal was already under consideration to award bonus semesters of time released from teaching for selected faculty to pursue research projects, based on their past research productivity and proposed project. Other transparent direct financial mechanisms may be introduced to return a share of overhead charges on an externally funded grant to support the faculty who are successful in these competitive endeavors. The field of economics, in contrast to some professional disciplines in the College of Business Administration, has opportunities to secure research support from NIH, NSF, and other governmental and private foundation sources. But the investment of faculty time and energy to search for funding should be facilitated by a specialized research grant administrator who can spend time with faculty, especially in the first application cycle with a new agency.

Finally, the research faculty associated with the PhD program should have an explicit travel and expense budget for inviting visitors to speak on research topics related to the PhD training program. These visitors will broaden the exposure of the students to alternative methods and approaches in their field of study, and may introduce them to different data sources they can use in their dissertation research. These seminar speakers are a particularly valuable resource for the research faculty, as well as for the PhD students in a small department. Currently, there is funding in the College for outside speakers, but it is not delegated to the Director of Graduate Studies where it could be responsibly allocated over the academic year to improve the PhD Program.

The Economics PhD student is being trained primarily to undertake advanced empirical economic research in a subset of micro economic fields. To attract the strongest students and provide them with these applied skills in the shortest possible time, it would be reasonable to relax the requirement that they complete five MBA field courses in the College. These courses may occasionally fit the research needs of a student, as in finance and statistics, but to our knowledge they are not commonly required in other Economics PhD granting institutions. They may add as much as a year to the course work required for a PhD in Economics at USF. This change in curriculum should be placed in the hands of the economics faculty in the program, but both students and faculty we spoke to recommend such a change overwhelmingly.

Means should be found to allow PhD students to spend more time as research assistants with their faculty, and to reduce their currently heavy teaching loads. Even if teaching is delayed for the first two years of course work, and TA assignments are light in the second year, Research Assistantships could be awarded competitively to students with the best grades in related fields in the third or fourth year to apprentice students in the process of research.

Students could be better socialized even in such a small program, and this might be facilitated by assigning part of the time of one administrative assistant in the Economics Department to oversee the PhD program. More advanced students should be selected to mentor

new entrants to the program, and prepare them for their TA, and teaching assignments. The administrative assistant for the program could also relieve the Director of Graduate Studies of the task of responding to applicant queries and she might consolidate information to be sent by the Internet to program applicants. More systematic dissemination of information about the program across Latin America is likely to produce a substantial pool of strong applicants from the better MA programs in Economics, which have evolved to relatively high academic standards in such countries as Brazil, Chile, Mexico, Colombia, and Argentina.

#### Conclusions

A viable small PhD program in economics has been created in a short period of five years and begun to graduate well-trained, able, and professionally motivated economists. This achievement occurred while faculty resources available for the program have diminished, and teaching by the Economics Department has grown substantially. Consolidation of the program may depend on securing additional lines for faculty in fields related to the applied microeconomic core of the program, and institutionalization of incentives to reward faculty research and advanced graduate training, and a modest refocusing of the curriculum on the key courses in economic theory, statistics, and empirical applications, and reducing student teaching loads, and increasing student involvement in the research projects of their faculty advisors.

#### Appendix D: Sample Syllabi

Economics of Health Care I (ECO6536.901F09) Syllabus Department of Economics University of South Florida Fall 2009

INSTRUCTOR: Associate Professor Murat K. Munkin Email: mmunkin@coba.usf.edu Meeting: Tuesdays 6:20-9:05 pm BSN 112 Office Hours: Wednesdays 12:00-2:00 PM BSN 3426

#### COURSE GOALS:

The course goals are:

(1) Provide a detailed description of the institutional features of the health care market and current trends in this rapidly changing field;

(2) Demonstrate the use and usefulness of analyzing the health care market using tools of economic analysis.

Health economics is an active field of microeconomics with a large and growing literature. This class will provide an introduction to the health care system in the US. We will discuss some of the key concepts that health economists use to analyze health care markets. Compared to other areas of economics, health economics is complicated by a lack of information (about what health services the consumer needs), great uncertainty (hence insurance) and payment through third parties (insurance companies) rather than direct payment by the consumer.

#### **TEXTBOOK:**

Sherman Folland, Allen C. Goodman and Miron Stano, *The Economics of Health and Health Care*, 5th edition, Prentice Hall, 2006 (Required).

Additional papers will be assigned for reading. I will either upload pdf files or references to the blackboard.

#### **Course Requirements and Grading**

You will be responsible for all material discussed in class. Most of this material will be taken from your textbook, but also will cover certain topics, which are not in your textbook. You will **not** be responsible for material that is in your textbook but not covered in class.

There will be five homework assignments. You will have a week since the announcement of an assignment in class to complete it. Assignments will be graded. Solutions will be discussed in class. There are a midterm exam and a final. All exams are closed book.

Assignments:	20%	Due dates of five assignments will be announced
Midterm:	40%	October 27
Final Exam:	40%	Tuesday December 8, 5:30-7:30 pm

**Important**: If you have a **very good reason** (according to me) for not being able to take an exam you must talk to me about it as soon as possible.

#### COURSE OUTLINE (tentative):

#### Introduction

1. U.S. Health Care Expenditures, Uses and Sources. The Relevance of Health Economics (August 25).

2. Review of Microeconomic and Statistical Tools for Health Economics (September 1).

3. Economic Efficiency and Cost Benefit Analysis (September 8).

Production of Health

- 4. The Production of Health; Cost and Technology of Health Care (September 15).
- 5. Demand for Health Capital (September 22).

Health Insurance

- 6. Demand and Supply of Health Insurance (September 29).
- 7. Managed Care (October 6).
- 8. Medicare and Medicaid (October 13)

#### Providers

- 9. Hospitals and Long-Term Care (October 20)
- 10. Physicians and Professional Training (November 3)
- 11. Pharmaceutical Industry (November 10)

**Additional Topics** 

- 12. Comparative Health Care Systems (November 17).
- 13. Health System Reform (November 24)

#### ECONOMICS OF HEALTH CARE II SPRING 2008

**Instructor:** Gabriel Picone, BSN 3418, 4-6537 (Econ dept.: 4-4252), **email**: GPICONE@COBA.USF.EDU

#### **Time and Location of Class:**

**T** 6:00-8:50, BSN 2202A **Office Hours**: TR 3:30-4:30 by appointment

#### **Course Description**

In this survey course, students will read articles by prominent authors in the field of health economics. Students will develop an idea of what major topics comprise the field of health economics and will learn how economists have applied economic theory and econometrics to study issues regarding health care markets and related public policies. **Grading** 

Students Presentations: 50% Final paper: 50%

#### **Reading List (Provisional)**

Overviews and Paradigms

- Grossman, M. 2000. The human capital model, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 347-408.
- Jones, A. 2000. Health Econometrics, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 265-346. (Reference)
- Cutler, D. and R. Zeckhauser. 2000. The anatomy of health insurance, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 563-644.
- Dranove D. and M. Satterthwaite. 2000. The industrial organization of health care markets, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 1093-1140.
- Sloan, FA 2000. Non-for-profit ownership and hospital behavior, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier.

Hospital Behavior and competition

- Kessler D and M McClellan. Is Hospital Competition Socially Wasteful? *Quarterly Journal of Economics* 115(2): 577-615. 2000.
- Dafny, Leemore. How do hospitals respond to price changes? *American Economic Review* 95(5), 2005.
- Dafny, Leemore. Games Hospitals play: Entry Deterrence in the Hospital Market. *Journal of Economics and Management Strategy* 14(3), 2005.
- Sloan FA, GA Picone, D Taylor, SY Chou. Hospital Ownership and Cost Quality of Care: Is There a Dime Worth of Difference? *Journal of Health Economics* 20(1): 1-21.

2001.

• Picone, Chou, and Sloan "Are For-Profit Hospital Conversions Harmful to patients and Medicare?", *Rand Journal of Economics*, Vol. 33, No.3, (Autumn 2002), 507-523.

#### Long Term Care and Nursing Homes

- Norton, E. 2000. Long-term care, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 955-994.
- Hoerger, Picone, and Sloan. 1996. Public subsidies, private provision of care and living arrangements. *Review of Economic and Statistics*, 78(3): 428:40. (Larry)

Pharmaceuticals

- Scherer FM. The Pharmaceutical Industry, Handbook of Health Economics, Ch. 25.
- Danzon P. and L. Chao 2000. Cross-national price differences for pharmaceuticals: how large and why? *Journal of Health Economics* 19, 159-195.

• Timur A: The Single Market and Pharmaceutical Industry in the European Union:

Is there any evidence of Price Convergence? University of South Florida, PhD dissertation December 2006.

Medical Malpractice

- Danson, P. 2000. Liability for Medical Malpractice, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 1341-1404.(Carlos Andres)
- Kessler, D. and M. McClellan. 1996. Do doctors practice defensive medicine? *Quarterly Journal of Economics* 61(2): 352-411. (Finnie)

#### Peer Effects

- Manski, C. 2000. Economic Analysis of Social Interactions, *Journal of Economics Perspectives* 14(3). Summer 2000.
- Clark and Loheac 2007. It wasn't me, it was them! Social influence in risky behavior by adolescents *Journal of Health Economics* 26, 763-784.

#### Physician behavior

• McGuire T. 2000. Physician Agency, in Culyer and Newhouse, eds., Handbook of health economics, Amsterdam, Elsevier, 462-536. (Finnie)

#### University of South Florida College of Arts and Sciences Economics of Health Care II Syllabus

Course schedule: Tuesday 6:20pm-9:05pm, BSN 1403 Office hours: Thursday 4:30pm-6:30pm and by appointment Instructor: Prof. Benedicte APOUEY Office: BSN 3433 Phone: (813)974-0461 E-mail: benedicte@usf.edu

#### **Course goals**

In this course, students will read articles by prominent authors in the field of health economics. We will learn how economists have applied economic theory and econometrics to study issues regarding health care markets and the determinants of health.

#### **Policy on recording lectures**

Neither audio nor video-taping are allowed.

#### Grading

Grades for this course will be exclusively based on students' presentations. Each student must present 5 papers. During their presentations, students can project the paper (so that other students can see the model, equations, tables and figures).

#### **Tentative Reading List**

#### **Overviews of Health Economics**

Culyer A.J., Newhouse J.P., 2000, Introduction: the state and scope of health economics, Handbook of Health Economics, Elsevier.

Fuchs V., 2000, The future of health economics, Journal of Health Economics, 19, 141-157

#### Health production. Income and Health

Case A., Lubotsky D., Paxson C., 2002, Economic status and health in childhood: the origins of the gradient, The American Economic Review, 92 (5), 1308-1344.

Propper C., Rigg J., Burgess S., 2007, Child health: evidence on the roles of family income and maternal mental health from a UK birth cohort, Health Economics, 16 (11), 1245-1269.

Ruhm C., 2000, Are Recessions Good for Your Health?, QJE, 115, 617-650.

Khanam, Nghiem, Connelly, 2009, Child health and the income gradient: Evidence from Australia, Journal of Health Economics 28, 805-817.

Lindahl M., 2005, Estimating the Effect of Income on Health and Mortality Using Lottery Prizes as an Exogenous Source of Variation in Income, J. Human Resources XL, 144-168.

#### Economics of Obesity

Cutler D.M., Glaeser E.L., Shapiro J.M., 2003, Why have Americans become more obese? Journal of Economic Perspectives, 17, 93-118.

Christakis N.A., Fowler J.H., 2007, The Spread of Obesity in a Large Social Network over 32 Years, New England Journal of Medicine, 357, 370-9.

Lakdawalla D., Philipson T, 2002, The Growth of Obesity and Technological Change: A Theoretical and Empirical Examination, NBER WP.

Cohen-Cole E., Fletcher J, 2008, Is Obesity Contagious? Social Networks versus Environmental Factors in the Obesity Epidemic, Journal of Health Economics.

Powdthavee N., Oswald A., 2007, Obesity, unhappiness, and the challenge of affluence: theory and evidence, Economic Journal, 117, F441-454.

#### The Demand for Health

Powdthavee N., Oswald A., 2008, Does happiness adapt? A longitudinal study of disability with implications for economists and judges, Journal of Public Economics, 92, 1061-1077.

Wagstaff A., 1986, The demand for health: theory and application, Journal of Epidemiology and Community Health, 40, 1-11.

#### Economics of Health insurance

Cutler D., Zeckhauser R., 2000, The Anatomy of Health Insurance, in Handbook of Health Economics, Volume 1, ed. by A.J. Culyer and J.P. Newhouse. Elsevier: Amsterdam.

Geoffard P-Y., 2006, Incentive and selection effects in health insurance, The Elgar Companion to Health Economics, Edward Elgar.

Dranove D., Satterthwaite M.A., 2000, The industrial organization of health care markets,

Handbook of Health Economics, Elsevier

#### **Pharmaceuticals**

Scherer F.M., The Pharmaceutical Industry, Handbook of Health Economics, Volume 1B, Chapter 25.

Danzon P., Chao L., 2000, Cross-national Price Differences for Pharmaceuticals: How Large and Why? Journal of Health Economics, 19, 159-195.

#### Hospitals

Sloan F.A., Not-For-Profit Ownership and Hospital Behavior, Handbook of Health Economics, Volume 1B, Chapter 21.

Dafny L., 2005, How do Hospitals Respond to Price changes? AER, 95(5).

Sloan F.A., Picone G.A., Taylor D., Chou S.Y., 2001, Hospital Ownership and Cost Quality of Care: Is There a Dime Worth of Difference? Journal of Health Economics, 20(1), 1-21.

Picone, Chou, Sloan, 2002, Are For-Profit Hospital Conversions Harmful to Patients and Medicare, Rand Journal of Economics, Volume 33, 3, 507-523.

#### Physicians

Iverson T., Luras H., 2000, The effect of capitation on GPs referral decisions, Health Economics, 9, 199-210.

#### Information

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

USF is committed to providing reasonable support for students with disabilities. Students with disabilities are responsible for registering with Students with Disabilities Services in order to receive academic accommodations. SDS encourages students to notify instructors of accommodating needs at least 5 business days prior to needing accommodation. A letter from SDS must accompany this request.

#### University of South Florida ECP 7406 Industrial Organization II Course Syllabus Fall 2008

Course schedule: Tuesday and Thursday 2-3:15, BSN 112 Office Hours: Tuesday and Thursday 1-2 pm and by appointment Office: BSN 3419 Phone: 813-974-6521 Email: ydeng@coba.usf.edu (Please include Eco 6936 in the subject line)

#### **Course Objectives:**

This is the second of a two-course sequence in Industrial Organization primarily directed towards Ph.D. students in economics who have had basic training in microeconomic theory and econometrics.

This course will introduce students to a list of advanced topics in empirical I.O., of which the main goal is to expose the students to modern methods and techniques in estimating a rich set of models on the behavior of firms, the nature of market equilibrium and the influence of economic policy on markets.

A series of models of increasing realism and complexity will be introduced. At each stage a brief review on the relevant theory will be given, but the emphasis will be put on a detailed study of the empirical applications of the theory to real world data. For example, we will look at how knowledge spillover and parallel trade would affect the price of pharmaceutical drugs in Europe.

Students are expected to have studied most of the theoretical part in the first semester of the course and in previous training in microeconomic theory and game theory. Specific topics in econometrics and computations may be introduced to the students when necessary for model estimation.

**Required Readings:** A set of journal articles will be designated in class as the basic reference for the course. There is no required textbook but the following books are recommended as references:

Jean Tirole's The Theory of Industrial Organization 1988

R. Schmalensee & R.D. Willig edited *Handbook of Industrial Organization* Vols. 1 and 2, 1989

Mark Armstrong and Robert H. Porter edited *Handbook of Industrial Organization* Vol. 3, 2007

#### **Attendance Policy:**

Students are expected to attend the first lecture. Those who do not will be dropped per university policy. Attendance in all lectures is strongly recommended. Students with excessive absence without valid reasons will be asked to drop the class.

#### **Grade Determination:**

The grade will be based on a number of take-home exercises/exams. Students are also expected

to make presentations on papers relevant to the course. Presentation performance counts for 50% of the grade and the take-home exercises the other 50%.

Take-home exercises dates: September 4, 18, October 2, 16, 30, and November 18.

Presentation dates: September 25 and October 28 for the mid-term presentation; December 4 for the final presentation.

#### **Course Outline:**

The course will generally follow the outline given below. We will get as far as time allows.

- 1 General Empirical "Facts", and Some I.O. History : August 26, 28 and September 2
- 2 Traditional Empirical Tools, Models and Problems: September 4, 9, 11, 16
  - 1) Cost and Production Functions
  - 2) Demand and Supply
- 3 Static Models: September 18, 23, 25(student presentation), 30, October 2, 7, 9, and 14
  - 1) The Cournot Model and Estimation
  - 2) Price Setting Models (Homogenrous goods)
  - 3) Price Setting Models (Differentiated Products)
  - 4) Differentiated Products, Estimation
- 4 Two Period Entry Models and Market Structure: October 16, 21, 23, 28 (student presentation) 5 Mergers: October 30
- 6 Single Agent Dynamics: November 4, 6, 13
- 7 Dynamic Equilibrium Models with Heterogeneous Agents: November 18, 20, 25
- 8 Collusion: December 2, 4 (student presentation)

#### **Miscellaneous Information:**

Students are not permitted to sell notes or tapes of class lectures.

Disability Accommodations: Students with disabilities are encouraged to consult me as soon as possible. If accommodations are needed, a letter from the Office of Student Disability Services (SVC 1133) will be required.

Religious Observance: Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to me, in writing, by the second class meeting.

University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity should make arrangements with me prior to any missed class and/or scheduled exam.

Faculty Name	Theses	Dissertations	<b>Professional Publications</b>
Bénédicte Apouey	0	0	"Quel Prix pour la Santé? Efficacité et Équité des Mesures de Participation Financière des Assurés aux Dépenses de Soins," <i>Chantiers</i> <i>Politiques</i> , 2009.
			"Measuring Health Polarization with Self- Assessed Health Data," <i>Health Economics</i> , September 2007, Vol. 16 (9), pp. 875-894.
			"On Measuring and Explaining Socio- Economic Polarization in Health with an Application to French Data." Under Review.
Andrei Barbos	0	0	"Context Effects: A Representation of Choices from Categories," <i>Journal of</i> <i>Economic Theory</i> (forthcoming).
Yi Deng	2	2	"The Value of Knowledge Spillovers in the U.S. Semiconductor Industry," <i>International</i> <i>Journal of Industrial Organization</i> , July 2008, Vol. 26 (4), pp. 1044-1058.
			"Private Value of European Patents," <i>European Economic Review</i> , October 2007, Vol. 51 (7), pp. 1785-1812.
			"The Effects of Patent Regime Changes: A Case Study of the European Patent Office," <i>International Journal of Industrial</i> <i>Organization</i> , February 2007, Vol. 25 (1), pp. 121-138.
Joseph DeSalvo	3	5	"The Effect of Transportation Subsidies on Urban Sprawl" (with Q. Su), <i>Journal of</i> <i>Regional Science</i> , August 2008, Vol. 48 (3), pp. 567-594.
			"Mode Choice, Commuting Cost, and Urban Household Behavior" (with M. Huq), <i>Journal of Regional Science</i> , August 2005, Vol. 45 (3), pp. 493-517.
Mark Herander	3	2	"Exports and the Structure of Immigrant- Based Networks: The Role of Geographic Proximity" (with L.A. Saavedra), <i>Review of</i> <i>Economics and Statistics</i> , May 2005, Vol. 87 (2), pp. 323-335.
K. Gyimah- Brempong	8	3	"Aid and Economic Development: A Robust Approach" (with J. Racine), <i>Journal of</i>

Appendix E: Faculty	Productivity,	2004/05-2008/09	9
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	International Trade and Economic
	Development (forthcoming).
	"The Effect of the Liberalization of
	Investment: Policies on Employment and
	Investment. I oncles on Employment and
	Investment in Multination Corporations in
	Africa" (with E. Asiedu), African
	Development Review, April 2008, Vol. 20
	(1), pp. 49-66.
	"Crime and Race, A Plea for New Ideas,"
	Review of Black Political Economy.
	December 2007, Vol. 34 (3-4), pp. 173-185.
	"Talagommunications Investment in Africa.
	Implications of US Reform of the
	International Settlement Rate System" (with
	J. Karıkarı), African Development Review,
	December 2006, Vol. 18 (3), pp. 444-470.
	"Neighborhood Income, Alcohol Availability
	and Crime Rates," Review of Black Political
	<i>Economy</i> , March 2006, Vol. 33 (3), pp. 21-
	ΔΔ
	"Crime and Dunishments And Strin Huse
	Chine and Pullishment. And Skin Hue
	100? (with Gregory Price), American
	Economic Review Papers and Proceedings,
	May 2006, Vol. 96 (2), pp. 246-250.
	"Alcohol Availability and Crime: A Robust
	Approach" (with Jeffrey Racine), Applied
	Economics, 2006, Vol. 38, pp. 1293-1307.
	"Corruption and Economic Growth: Are
	there Regional Differences?" (with Samaria
	Munoz de Camacho) <i>Economics of</i>
	Governance 2006 Vol 7 (3) pp 245 269
	<i>Governunce</i> , 2000, Vol. 7 (5), pp. 245-209.
	"Human Capital and Essenantia Crowthe L
	Human Capital and Economic Growth: Is
	Africa Different?" (with R. Mark Wilson),
	Journal of African Development, 2006, Vol.
	7 (1), pp. 73-109.
	"The Effects of Higher Education on
	Economic Growth in Africa" (with Oliver
	Paddison and Workie Mitiku), Journal of
	Development Studies, April 2006. Vol. 42
	(3), pp. 509-529.
	(-), <b>PP</b> . <b>C</b> () <b>C</b> =/.

			"Civil War Incidence and Economic Growth in Africa" (with Marva Corley), <i>Journal of</i> <i>African Economies</i> , 2005, Vol. 14 (2), pp. 270-311.
			"Health Human Capital ad Economic Growth: A Comparative Study" (with R. Mark Wilson), <i>Quarterly Review of</i> <i>Economics and Finance</i> , 2004, Vol. 44, pp. 296-320.
Bradley Kamp	2	3	"Buying Market Share: Agency Problem or Predatory Pricing?" (with C.R. Thomas), <i>Review of Law and Economics</i> , 2006, Vol. 2 (1), Article 1.
Michael Loewy	4	3	"Optimal Tariffs, Optimal Taxes, and Economic Development," <i>Journal of</i> <i>International Trade and Economic</i> <i>Development</i> , December 2004, Vol. 13 (4), pp. 461-486.
			"Free Trade," in A. Kuper and J. Kuper (eds.), <i>The Social Science Encyclopedia, 3e,</i> <i>London: Routledge</i> , 2004, pp. 386-88.
			"Tariffs, Taxes, Government, and Growth," in L.A. Finley (ed.), Perspectives on Economic Growth, Hauppauge, NY: <i>Nova</i> <i>Science Publishers</i> , 2006, pp. 193-219. [Reprinted on T.B. Caldwell (ed.), Taxation: 21 <sup>st</sup> Century Issues and Challenges, Hauppauge, NY: <i>Nova Science Publishers</i> , 2009.]
Murat Munkin	2	2	"Bayesian Analysis of the OPES Model with a Non-Parametric Component: Application to Dental Insurance and Dental Care" (with P.K. Trivedi), <i>Advances in Econometrics</i> (forthcoming).
			"Demand for Cigarettes: A Mixed Binary- Ordered Probit Approach" (with P. Kasteridis and S. Yen), <i>Applied Economics</i> (forthcoming).
			"Bayesian Analysis of the Ordered Probit Model with Endogenous Selection" (with P.K. Trivedi), <i>Journal of Econometrics</i> , April 2008, Vol. 143 (2), pp. 334-348.
			"Bayesian Analysis of the Two-Part Model with Endogeneity: Application to Health

			Care Expenditure" (with D. Partha and P.K.
			Trivedi) Journal of Applied Econometrics
			November 2006 Vol 21 (7) pp 1081 1000
			November 2000, vol. 21 (7), pp. 1001-1077.
			"Private Insurance, Selection, and Health
			Care Use: A Bayesian Analysis of a Roy-
			Type Model" (with D Partha and P K
			Type Woder (with D. 1 and and 1.K.) Trive $I$ $L$ $L$ $L$ $L$
			Irivedi), Journal of Business and Economic
			Statistics, October 2006, Vol. 24 (4), pp. 403-
			415.
Gabriel Picone	6	8	"The Price of Smoking" (with F Sloan I
	0	0	Ostermann C Conover and D Taylor) MIT
			D 2004
			Press, 2004.
			"Distance Decrease with Differentiation:
			Strategic Clustering by Petailers" (with D
			Didley and D. Zandhanzan). Lutawati and
			Ridley and P. Zandbergen), International
			Journal of Industrial Organization
			(forthcoming).
			"A Comparison of Treatment Effect
			Estimators using Severity of Illness
			Information from Hogpital Charte" (with A
			Khwaja, M. Salm, and J. Trogdon), <i>Journal</i>
			of Applied Econometrics (forthcoming).
			"I ongitudinal Analysis of the Relationship
			hotwoon Degular Eve Eveminations and
			between Regular Eye Examinations and
			Changes in Visual and Functional Status"
			(with F. Sloan, D. Brown, and P. Lee),
			Journal of the American Geriatrics Society,
			November 2005, Vol. 53 (11), pp. 1867-
			1874
			1074.
			"Do Routine Eve Exams Improve Vision?"
			with Fronk Sloon and Davak Drown
			with Frank Stoan and Derek Brown,
			International Journal of Health Care
			Finance and Economics, March 2004, Vol. 4
			(1), pp. 43-63.
			"Effects of Risk and Time Preference and
			Expected Longevity on Demand for Medical
			Tooto" (with Eron's Cloop and Day Toolog)
			Tests (with Frank Stoan and Don Taylor),
			Journal of Risk and Uncertainty, January
			2004, Vol. 28 (1), pp. 39-53.
			"Monitoring Visual Status: Why Patients do
			or do not Comply with Practice Guidelines"
			(with E Sleen D Dresser E Carliele 1D
			(with F. Sloan, D. Brown, E. Carlisle, and P.
			Lee), <i>Health Services Review</i> , October 2004,

			Vol. 39 (5), pp. 1429-1448.
			"The Effect of the Tobacco Settlement and Smoking Bans on Alcohol Consumption" (with F. Sloan and J. Trogdon). <i>Health Economics</i> , October 2004, Vol. 13 (10), pp. 1063-1080.
Philip Porter	5	4	"Public Subsidies and the Location Pricing of Sports" (with C. Thomas), <i>Southern</i> <i>Economic Journal</i> , October 2009, Vol. 76 (2) (forthcoming).
			"The Economic Impact of the Olympic Games: Ex Ante Predictions and Ex Post Reality" (with D. Fletcher), <i>Journal of Sports</i> <i>Management</i> , July 2008, Vol. 22 (4), pp. 470-486.
			"The Paradox of Inelastic Sport Pricing," <i>Managerial and Decision Economics</i> , Spring 2007, Vol. 28 (1), pp. 157-158.
			"Political Equilibrium and the Provision of Public Goods" (with J. Goodman), <i>Public</i> <i>Choice</i> , September 2004, Vol. 120 (3-4), pp. 247-266.

#### Appendix F

#### Academic Resources in Economics Available in the USF Libraries

#### **Volumes in the USF Libraries in the Subject Area of Economics**

#### Monographs/Books

HB71-74 Economics as a science. Relation to other subjects (658) HB75-130 History of economics. History of economic theory Including special economic schools (1,748) HB131-147 Methodology (954) HB201-206 Value. Utility (121) HB221-236 Price (215) HB238-251 Competition. Production. Wealth (110) HB501 Capital. Capitalism (474) HB502-715 Income. Factor shares (639) HB801-843 Consumption. Demand (182) HB846-846.8 Welfare theory (197) HB848-3697 Demography. Population. Vital events (1,778) HB3711-3840 Business cycles. Economic fluctuations (64)· HC Economic History – over 5,000 books

**Electronic Books & other Online Resources (including Government Publications)** •<u>USF ONLINE RESOURCE</u> (8,338)

Periodicals/Journals – Print & Electronic – 3, 566 titles

Electronic Journals – 1,330 titles

#### Major Databases in the Subject Area of Economics

#### **Balance of Payment Statistics**

Balance of payments statistics summarizes, for a specific period, the economic transactions of an economy with the rest of the world. It reports total goods, services, factor income, and current transfers an economy receives from or provides to the rest of the world. The database contains time series data from 1948 and approximately 100,000 time series covering more than 170 countries and areas.

#### **Conference Board: Business, Knowledge, Research**

This is a searchable database of full-text research reports on the latest issues in business management and US and global economics. Proprietary, nonbiased research includes studies of Fortune 500 companies on business trends, leadership decisions, performance excellence, corporate governance, HR, productivity, CRM and more. Economics material includes topline US and global economic indicators and analysis and forecasts of US and international economic conditions by Conference Board's chief economist.

#### **Direction of Trade Statistics**

The Direction of trade statistics (DOTS) present, for most member countries of the International

Monetary Fund (IMF), current figures on the value of exports and imports with the most important trading partners, providing current figures for about 158 countries. Smaller countries appear in the area and world tables. The information on exports and imports by trading partners that countries report to the IMF varies in terms of frequency and currency. Reported data, including total imports and exports reported for publication in the IMF International Financial Statistics (IFS), are the basis of all estimates in DOTS. The entire DOTS database is continuously supplemented with estimates.

#### EconLit

EconLit is the American Economic Association's electronic bibliography of economic literature. EconLit is an expanded version of the Journal of Economic Literature (JEL) indexes of journals, books, and dissertations. In addition, EconLit includes citations to articles in collective volumes indexed in the annual volumes of the Index of Economic Articles, articles from over 250 journals not indexed in JEL, and the full-text of JEL book reviews. EconLit also incorporates the Abstracts of Working Papers in Economics (AWPE) database licensed from Cambridge University Press.

#### **Economic Data: FRED II**

FRED II (Federal Reserve Economic Data) is a widely-used database of over 3000 U.S. economic time series. This site offers a wealth of economic data and information to promote economic education and enhance economic research. FRED II is updated regularly and allows 24/7 access to regional and national financial and economic data.

#### **EIU Executive Briefing**

Online service offering industry and strategic intelligence for senior executives for the world's 60 leading markets, organised around eight key industries. The industries are automotive, consumer goods, energy, financial services, food and drink, healthcare, miscellaneous, telecoms and IT, travel and transport.

#### FRASER: Federal Reserve Archival System for Economic Research

FRASER provides economic information and data to researchers who are interested in the U.S. economy. The database includes links to scanned images (in Adobe® Acrobat® PDF format) of historical economic statistical publications, releases, and documents. FRASER is a powerful tool that enables the researcher to recreate and evaluate previous economic research and policy. When used in conjunction with FRED®, the Federal Reserves's database for current economic information, the researcher can create uninterrupted data series by accessing sources previously available only in printed form.

#### **Gale Encyclopedia of Economic History**

This work is meant to help students understand the effects of U.S. legislation on the American consumer and economy. Some of the features are as follows: Era overviews offer broad introductions detailing typical industries, wages, and living conditions; event/movement profiles cover specific developments (Pullman strike, the antitrust movement, etc.); business/industry profiles offers details on companies and industries as well as their effects on daily life and social history, most include sources for further study; issue profiles discuss key social areas such as child labor, women in the workforce and immigrants' role in U.S. economics; geographic profiles cover the history of the colonies and states and includes details on immigration and development of local industry.

#### IBISWorld

IBISWorld provides reports for all of the 723 US industries enabling research on the entire sector of the U.S. economy. Information is updated every four months, ensuring the latest information. Reports are

divided into three searchable modules: industry market research; company research, and business environment. Market research reports contain trends, statistics and analysis on market size, market share of competitors and industry growth rates. Major market segments are identified and also those forces affecting demand and supply within the industry. Performance analysis includes emerging industry trends as well as recent production performance. Each comprehensive study also examines details such as the barriers to entry, industry averages, technology & systems and domestic and international markets. Tables and statistics include: industry revenue, exports, imports, wages and number of companies in the industry. Business environment research reports explain how economic, demographic and other changes influence people, enterprises and commerce. By using a unique 'outside-looking-in' approach one can examine a company's external environment to help successfully control business risks and identify market opportunities.

#### **International Financial Statistics**

International financial statistics online is a standard source of international statistics on all aspects of international and domestic finance. It reports, for most countries of the world, current data needed in the analysis of problems of international payments and of inflation and deflation, i.e., data on exchange rates, international liquidity, international banking, money and banking, interest rates, prices, production, international transactions, government accounts, and national accounts. This database contains time series data from 1948 and contains approximately 32,000 time series covering more than 200 countries. One can browse the database, select series of interest, and display and save the selected series in a spreadsheet format, such as Microsoft Excel.

#### **NBER:** National Bureau of Economic Research

The NBER, National Bureau of Economic Research, is a private, nonprofit, nonpartisan research organization dedicated to promoting a greater understanding of how the economy works. Research is conducted by more than 600 university professors around the country. They concentrate on four types of empirical research: developing new statistical measurements, estimating quantitative models of economic behavior, assessing the effects of public policies on the U.S. economy, and projecting the effects of alternative policy proposals. The NBER distributes research findings in various ways, in order to reach the widest possible audience. Nearly 500 NBER Working Papers are published each year, and many subsequently appear in scholarly journals. Full texts of Working Papers published from November 1994 to the present are available online.

#### **RGE Monitor**

RGE Monitor, named one of the world's best economic resources by Business Week, The Economist, Forbes and the Wall Street Journal, delivers global economic insights to the business and academic community. Founded in 2004 by a prestigious team of economic and political experts, RGE Monitor defines key economic and strategic debates and presents arguments on all sides. This intelligence, along with analysis from internationally-known experts, yields focused snapshots and deeper perspectives. Content and analysis is delivered through a variety of channels. "Spotlight Issues" are identified and set in priority order, searchable by either importance or date. "Global Daily Digests" are available on the website, through email, or by a continuously updated RSS feeds. "Working Paper Series" highlights the most relevant publications from the economic experts from the National Bureau of Economic Research (NBER) and the Center for Economic Policy Research (CEPR). Note: Requires the creation of an account. Once established, user name is your email address.

#### **SourceOECD**

SourceOECD is an online library of statistical databases, books, and periodicals from OECD, the Organisation for Economic Co-Operation and Development. The OECD, a membership of 30 countries, is one of the world's largest publishers in the fields of economics and public policy. SourceOECD is

comprised of over 1,800 online books with unrestricted access grouped in 24 themes, 24 periodicals, 3 reference titles, and 26 OECD statistical databases, all in full text. Themed groupings include: education, energy, emerging economies, environment & sustainable development, finance and investment, science, social issues, urban and regional development, transportation, and more. Twenty-six statistical databases from the OECD are presented enabling users to download data and build their own tables, in real time. Users can also build cross-database tables. OECD has recently launched OECD.Stat that allows searches across the various OECD databases. It is now in a beta test until September, 2008. The USF Libraries hold a subscription to all OECD online publications with the exception of the third-party IEA statistics.

#### **STAT-USA Internet**

Site provides access to approximately 3,000 statistical publications including economic and trade related records. Includes links to: State of the nation (current and historical economic and financial releases and economic data) and: Globus & NTDB (current and historical trade-related releases, international market research, trade opportunities, country analysis, and our trade library, the National Trade Data Bank, NTDB).

#### ViewsWire

ViewsWire highlights daily more than 250 important economic, political and market developments for 201 countries and provides concise analytical briefings on their implications for business. ViewsWire is the product of the Economist Intelligence Unit's Country Analysis Team. ViewsWire provides timely analysis, as events take place, putting them in their context and forecasting future developments. A "Critical issues" section pulls together the latest analysis on the most pressing topic of the day. The "Economic quick views" section provides insight on the latest news for the world's most important economies. The USF Libraries also subscribe to Executive briefing within ViewsWire, providing best practices and a source of management thinking in partnership with Harvard Business School Publishing. Includes selected and relevant articles to The Economist online.

#### WDI Online

WDI online: world development indicators, is developed and maintained by the World Bank. It is a critical source of data on the global economy, containing statistical data for over 900 development indicators and time series data from 1960 to the present for 227 economies. Data includes social, economic, financial, natural resource, and environmental indicators. Includes data on such areas as pollution, energy production, poverty, trade, labor force, health, education, exports, government debt, and telecommunications. The interface is supported in seven languages. Data can be exported to standard formats like Excel, helping to make WDI online an essential tool for researching global economies.

#### **ABI INFORM Global**

Most scholarly and comprehensive way to explore and understand business research topics. Search nearly 1800 worldwide business periodicals for in-depth coverage of business and economic conditions, management techniques, theory, and practice of business, advertising, marketing, economics, human resources, finance, taxation, computers, and more. Expanded international coverage. Now includes online access to articles in the Wall Street Journal.

#### **Business Source Premier**

Business Source premier is one of the definitive scholarly databases in the field of business due to its depth and coverage. The database provides full text articles from more than 2,300 journals, including over 1,100 peer reviewed journals, and indexing for an additional 1,000 titles. Full text coverage dates vary, but some go back to the first issue of the journal. Full text articles from the Harvard business review date back to 1922.

#### LexisNexis Academic

Research areas in LEXIS-NEXIS Academic Universe cover news, industry, and market news; legal news and research; company financial information; general medical topics ; accounting, auditing, and tax information; law reviews; case law; U.S. Code.

#### Wilson Business Full-text

Wilson business full text provides fast, convenient access to a multitude of outstanding sources -- from The New York Times Business Section and The Wall Street Journal to magazines and scholarly journals. Covers a wide range of specialties: Accounting; Acquisitions & mergers; Advertising; Banking; Building & construction; Chemicals and pharmaceuticals; Communications; Computers; Cosmetics industry; Economics; Electronics; Entertainment industry; Finance; Financial services; Government regulations; Health care; Hospitality & tourism; Human resources; Industrial relations; Insurance; International business; Investments; Management; Marketing; Mass media; Occupational health & safety; Oil & gas; Paper & pulp industries; Public utilities; Publishing; Purchasing; Real estate; Retail trade; Small business; Taxation; Technology.

#### **Business and Financial Datasets - WRDS Platform**

USF subscribes to three sources of data accessed through WRDS (Wharton Research Data Services). These are Compustat, CRSP, and I/B/E/S. Additionally, through our WRDS subscription, USF also has access to: Bank Regulatory; Blockholders; CBOE Indexes; CISDM; DMEF; Dow Jones; FDIC; Fama French, Momentum, and Liquity; Federal Reserve Bank Reports; PHLX; Penn World Tables; SEC Disclosure of Order Execution; and TRACE.

#### **Please click here for further information on WRDS.**

### The following entries provide information regarding several of the business and financial datasets available via the WRDS platform.

COMPUSTAT (from Standard & Poor's) provides more than 300 annual and 100 quarterly Income Statement, Balance Sheet, Statement of Cash Flows, and supplemental data items on more than 24,000 publicly held companies. The COMPUSTAT databases on WRDS include Industrial, Full Coverage, Research; Prices, Dividends & Earnings; Segments; Bank; Canadian; Global Vantage; and EXECUCOMP. This is available to eligible USF affiliates via the WRDS platform.

#### • <u>CRSP</u>

CRSP (Center for Research in Security Prices) is a research center at the University of Chicago Graduate School of Business, and maintains historical data spanning from December 1925 to the present. CRSP's trademark of unique issue identifiers tracks a continuous history of securities, providing a seamless time-series examination of the issue's history. This is available to eligible

<sup>• &</sup>lt;u>COMPUSTAT</u>

USF affiliates via the WRDS platform.

• <u>I/B/E/S</u> <u>Historical</u> <u>Estimates</u> I/B/E/S International Inc. created their Academic Research Program over 30 years ago to provide both summary and individual analyst forecasts of company earnings, cash flows, and other important financial items. The I/B/E/S database contains analyst estimates of various measures of U.S. and international company financial performance, as well as analyst Buy/Hold/Sell recommendations. There are three primary sections to the I/B/E/S database: Detail History, Summary History and Recommendations. The Detail History file contains individual analyst estimates over time. The Summary History file contains consensus estimates of all analysts. The Recommendations files contain analyst's Buy/Hold/Sell recommendations. The database is updated within WRDS on a quarterly basis and is available to eligible USF affiliates via the WRDS platform.

#### Business and Financial Datasets - Other Sources The follow entries provide information regarding several of the business and financial datasets outside those available on the WRDS platform.

• Datasteam Advance is one of the most respected historical financial numerical databases, covering financial instruments, equity and fixed-income securities and indicators for over 175 countries and 60 markets worldwide.

#### Selected Listing of Scholarly Online Journals in the Subject Area of Economics

#### **JSTOR Economics**

Provides image and full-text online access to back issues of selected scholarly journals.

Economics (97 titles)

- $\square$  African Economic History 1976-2005
  - African Economic History Review 1974-1975
- The American Economic Review 1911-2006
  - o American Economic Association Quarterly 1908-1910
  - o Publications of the American Economic Association 1886-1907
- American Journal of Agricultural Economics 1968-2003
  - o Journal of Farm Economics 1919-1967

- The American Journal of Economics and Sociology 1941-2003
- Annales d'Économie et de Statistique 1986-2007
  - o Annales de l'inséé 1970-1985
  - o Cahiers du Séminaire d'Économétrie 1951-1985
- $\square$  Annals of the American Academy of Political and Social Science 1890-2005
- Brookings Papers on Economic Activity 1970-2005
- Brookings Papers on Economic Activity. Microeconomics 1989-1998
- The Brookings Review 1982-2003
- Brookings Trade Forum 1998-2005
- Brookings-Wharton Papers on Urban Affairs 2000-2005
- The Business History Review 1954-2003
   Bulletin of the Business Historical Society 1926-1953
- The Canadian Journal of Economics / Revue canadienne d'Economique 1968-2005
  - The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique 1935-1967
  - o Contributions to Canadian Economics 1928-1934
- Canadian Journal of Political Science / Revue canadienne de science politique 1968-2003
  - The Canadian Journal of Economics and Political Science / Revue canadienne d'Economique et de Science politique 1935-1967
  - o Contributions to Canadian Economics 1928-1934
- Canadian Public Policy / Analyse de Politiques 1975-2007
- Desarrollo Económico 1961-2007
- Eastern European Economics 1962-2003
- Econometric Theory 1985-2003
- Econometrica 1933-2006
- Economía 2000-2005
- Economic and Political Weekly 1966-2003
- Economic Development and Cultural Change 1952-2003
- Economic Geography 1925-2003
- The Economic History Review 1927-2003
- The Economic Journal 1891-2003
- Economic Policy 1985-2003
- Economic Theory 1991-2005
- Economica 1921-2003
  - The European Journal of Health Economics 2001-2005
    - Health Economics in Prevention and Care 2000

- IMF Staff Papers 1999-2004
  - Staff Papers International Monetary Fund 1950-1998
- Industrial and Labor Relations Review 1947-2006
- Innovation Policy and the Economy 2000-2003
- International Economic Review 1960-2003
- International Journal of Health Care Finance and Economics 2001-2005
- Journal of Applied Econometrics 1986-2003
- Journal of Business & Economic Statistics 1983-2003
- The Journal of Developing Areas 1966-2004
- The Journal of Economic Education 1969-2003
- The Journal of Economic History 1941-2003
- Journal of Economic Literature 1969-2006
   Journal of Economic Abstracts 1963-1968
- The Journal of Economic Perspectives 1987-2006
- $\square$  The Journal of Human Resources 1966-2005
- The Journal of Industrial Economics 1952-2003
- □ Journal of Labor Economics 1983-2003
- $\Box$  Journal of Law and Economics 1958-2003
- Journal of Law, Economics, & Organization 1985-1997
- The Journal of Legal Studies 1972-2003
- Journal of Money, Credit and Banking 1969-2004
- The Journal of Political Economy 1892-2003
- Journal of Population Economics 1988-2005
- Journal of Post Keynesian Economics 1978-2003
- $\square$  The Journal of Risk and Insurance 1964-2005
  - The Journal of Insurance 1957-1963
  - Journal of the American Association of University Teachers of Insurance 1937-1956
  - Proceedings of the Annual Meeting (American Association of University Teachers of Insurance) 1933-1935
- Journal of the Economic and Social History of the Orient 1957-2003
- Journal of the European Economic Association 2003-2005
- Journal of Transport Economics and Policy 1967-2005
- Land Economics 1948-2005
  - The Journal of Land & Public Utility Economics 1925-1947

- Oxford Economic Papers 1938-1997
- Dublic Choice 1968-2005
  - Papers on Non-Market Decision Making 1967
- The Quarterly Journal of Economics 1886-2003
- $\square$  The RAND Journal of Economics 1984-2006
  - The Bell Journal of Economics 1975-1983
  - The Bell Journal of Economics and Management Science 1970-1974
- Review of African Political Economy 1974-2005
- Review of Agricultural Economics 1991-2003
  - North Central Journal of Agricultural Economics 1979-1990
  - o Illinois Agricultural Economics 1961-1978
- The Review of Economic Studies 1933-2005
- The Review of Economics and Statistics 1919-2003
- Review of International Political Economy 1994-2005
- Revue économique 1950-2005
- The Scandinavian Journal of Economics 1976-2003
  - The Swedish Journal of Economics 1965-1975
  - o Ekonomisk Tidskrift 1899-1964
- Southern Economic Journal 1933-2005
- Supreme Court Economic Review 1982-2003
- Tax Policy and the Economy 1987-2003
- The World Bank Economic Review 1986-2001
- The World Bank Research Observer 1986-2001

Prepared : September 28, 2009 Cheryl McCoy Academic Resources, Collections USF Tampa Library

Appendix G1	PhD									
	Students									
	In-State	Out-of-State	USF	Non-USF	Μ	F	W	Η	В	Α
2004-05	9	7	6	10	6	10	11	1	1	3
2005-06	9	7	6	10	6	10	11	1	1	3
2006-07	9	9	7	11	8	10	13	1	1	3
2007-08	14	6	13	7	13	7	14	0	2	4
2008-09	11	8	14	5	13	6	13	0	1	5
2009-10	13	11	11	13	14	10	17	1	1	5
Appendix G2	Faculty									
	US	Foreign			Μ	F	W	Η	В	Α
2008-09	10	4			12	2	10	1	1	2
2009-10	9	6			12	3	11	1	1	2

#### APPENDIX G: STUDENT AND FACULTY COMPOSITION

		]	<b>FABL</b>	E 1-B					
PROJECTED HEADCOUNT FROM POTENTIAL SOURCES									
	(0	-	-	-					

#### (Graduate Degree Program)

Source of Students	Year 1		Ye	ar 2	Yea	ar 3	Year 4		Year 5	
(Non-duplicated headcount in any given year)*	нс	FTE	нс	FTE	нс	FTE	нс	FTE	нс	FTE
Individuals drawn from agencies/industries in your service area (e.g., older returning students)	11	8.25	13	9.75	12	9	11	8.25	10	7.5
Students who transfer from other graduate programs within the university**	0	0	0	0	0	0	0	0	0	0
Individuals who have recently graduated from preceding degree programs at this university	6	4.5	6	4.5	7	5.25	13	9.75	14	10.5
Individuals who graduated from preceding degree programs at other Florida public universities	0	0	0	0	0	0	0	0	0	0
Individuals who graduated from preceding degree programs at non-public Florida institutions	7	5.25	7	5.25	9	6.75	6	4.5	8	6
Additional in-state residents***	0	0	0	0	0	0	0	0	0	0
Additional out-of-state residents***	0	0	0	0	0	0	0	0	0	0
Additional foreign residents***	0	0	0	0	0	0	0	0	0	0
Other (Explain)***	0	0	0	0	0	0	0	0	0	0
Totals	24	18	26	19.5	28	21	30	22.5	32	24

List projected yearly cumulative ENROLLMENTS instead of admissions \*

\*\* If numbers appear in this category, they should go DOWN in later years.
\*\*\* Do not include individuals counted in any PRIOR category in a given COLUMN.

TABLE	2
-------	---

			Yea	ar 1			Year 5				
		Fu	nding Source					Funding S	Source		
Instruction & Research Costs (non-cumulative)	Ph.D Program Reallocated Base* (E&G)	Enrollment Growth (E&G)	Other New Recurring (E&G)	New Non- Recurring (E&G)	Contracts & Grants (C&G)	Subtotal E&G and C&G	Ph.D Program Continuing Base** (E&G)	New Enrollment Growth (E&G)	Other*** (E&G)	Contracts & Grants (C&G)	Subtotal E&G and C&G
Faculty Salaries and Benefits	231,575	0	0	0	0	\$231,575	275,514	0	0	0	\$275,514
A & P Salaries and Benefits	0	0	0	0	0	\$0	0	0	0	0	\$0
USPS Salaries and Benefits	24,660	0	0	0	0	\$24,660	29,233	0	0	0	\$29,233
Other Personnel Services	0	0	0	0	0	\$0	0	0	0	0	\$0
Assistantships & Fellowships	150,000	0	0	0	0	\$150,000	186,000	0	0	0	\$186,000
Library	0	0	0	0	0	\$0	0	0	0	0	\$0
Expenses	11,947	0	0	0	0	\$11,947	13,861	0	0	0	\$13,861
Operating Capital Outlay	0	0	0	0	0	\$0	0	0	0	0	\$0
Special Categories	0	0	0	0	0	\$0	0	0	0	0	\$0
Total Costs	\$418,182	\$0	\$0	\$0	\$0	\$418,182	\$504,608	\$0	\$0	\$0	\$504,608

\*Identify portion of reallocation sources in Table 3 associated with PhD program.

\*\*Includes recurring E&G funded costs ("reallocated base," "enrollment growth," and "other new recurring") from Years 1-4 that continue into Year 5.

\*\*\*Identify if non-recurring.

#### Faculty and Staff Summary

Total Positions (person-years)	Year 1	Year 5
PhD program Faculty	1.70	2.08
A & P	0.00	0.00
USPS	1.00	1.00

#### Calculated Cost per Student FTE

	Year 1	Year 5
Total E&G Funding	\$418,182	\$504,608
Annual Student FTE	18	24
E&G Cost per FTE	\$23,232	\$21,025

 TABLE 3

 ANTICIPATED REALLOCATION OF EDUCATION & GENERAL FUNDS

Program and/or E&G account from which current funds will be reallocated during Year 1	Base before reallocation	Amount to be reallocated	Base after reallocation
Economics departmental budget/College of Business	2,369,662	418,182	\$1,951,480
Totals	\$2,369,662	\$418,182	\$1,951,480

Faculty Code	Faculty Name or ''New Hire'' Highest Degree Held Academic Discipline or Speciality	Rank	Contract Status	Initial Date for Participation in Program	Mos. Contract Year 1	FTE Year 1	% Effort for Prg. Year 1	PY Year 1	Mos. Contract Year 5	FTE Year 5	% Effort for Prg. Year 5	PY Year 5	
А	Benedicte Apouey PhD - Economics	Asst. Prof.	NTK	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Yi Deng PhD - Economics	Asst. Prof.	NTK	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Joseph DeSalvo PhD - Economics	Professor	TEN	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Kwabena Gyimah-Brempong PhD - Economics	Professor	TEN	Fall 2010	12	1.00	0.20	0.200	12	1.00	0.20	0.200	
А	Mark Herander PhD - Economics	Professor	TEN	Fall 2010	9	1.00	0.10	0.075					Drop eff: March 2014
А	Bradley Kamp PhD - Economics	Assoc. Prof	TEN	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Michael Loewy PhD - Economics	Assoc. Prof	TEN	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Murat Munkin PhD - Economics	Assoc. Prof	NTK	Fall 2010	9	1.00	0.25	0.188	9	1.00	0.25	0.188	
А	Gabriel Picone PhD - Economics	Professor	TEN	Fall 2010	9	1.00	0.25	0.188	9	1.00	0.25	0.188	
А	Philip Porter PhD - Economics	Professor	TEN	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
А	Andrei Barbos PhD - Economics	Assist. Prof	NTK	Fall 2010	9	1.00	0.20	0.150	9	1.00	0.20	0.150	
С	New Hire PhD - Economics	Asst. Prof.	NTK	Fall 2011	0	0.00	0.00	0.00	9	1.00	0.20	0.150	
С	New Hire PhD - Economics	Asst. Prof.	NTK	Fall 2013	0	0.00	0.00	0.00	9	1.00	0.20	0.150	

 TABLE 4

 ANTICIPATED FACULTY PARTICIPATION

 TABLE 4

 ANTICIPATED FACULTY PARTICIPATION

Faculty Code	Faculty Name or "New Hire" Highest Degree Held Academic Discipline or Speciality	Rank	Contract Status	Initial Date for Participation in Program	Mos. Contract Year 1	FTE Year 1	% Effort for Prg. Year 1	PY Year 1	Mos. Contract Year 5	FTE Year 5	% Effort for Prg. Year 5	PY Year 5
В	New Hire PhD - Economics	Asst. Prof.	NTK	Fall 2014	0	0.00	0.00	0.00	9	1.00	0.20	0.150
	Total Person-Years (PY)					9.25		1.70		11.50		2.075

Faculty			PY	Workload by Budget Classificat	tion
Code		Source of Funding	Year 1		Year 5
А	Exisitng faculty on a regular line	Current Education & General Revenue	1.70		1.68
В	New faculty to be hired on a vacant line	Current Education & General Revenue	0.00		0.20
С	New faculty to be hired on a new line	New Education & General Revenue	0.00		0.20
D	Existing faculty hired on contracts/grants	Contracts/Grants	0.00		0.00
Е	New faculty to be hired on contracts/grants	Contracts/Grants	0.00		0.00
		Overall Totals for Year	1 1.70	Year 5	2.08