

Florida Atlantic University 2013-14 Academic Program Review Self-Study Report: Department of Economics

Program:	CIP Code: 45.0601
Program Director/ Coordinator Name:	Charles Register
Program Self-Study Contact:	Charles Register
Self-Study Contact Email:	registec@fau.edu
Self-Study Contact Phone Number:	561-297-3220

Instructions: Please respond to each of the following items, providing interpretations, self-assessment and reflection where appropriate.

A. Mission and Purpose of the Program (School or College)

• In the context of the BOG and FAU mission and Strategic Plans. Links: FAU Strategic Plan, BoG Strategic Plan

Mission Statement and Purpose of the Program

Economics is often referred to as the science of decision-making. And all economic actors (individuals, families, political groupings and business groups) face myriad decisions daily. As such, the mission of the economics program is to provide students with the intellectual, analytical, quantitative and communication skills necessary to function successfully in a dynamic, increasingly inter-related global economy. Students will be given the training required to both understand and apply economic theory to real world situations and be required to effectively communicate such analysis to all stakeholders. With this background, students will be well-trained to enter graduate or law school and/or to develop a career path in general business, finance, marketing or in any level of government or non-profit institution. In addition, we recognize that we will not be able to fulfill this mission unless we as a faculty maintain currency and fluency in our discipline. As such, a significant part of the department's mission is to advance the understanding of economic analysis through high-level research that focuses both on theoretical and empirical questions. Finally, as a regional school within the State University System (SUS), we both recognize and encourage the contributions our program can make to South Florida's economic and social development.

This mission is tied directly to several key aspects of the University's 2012-2017 Strategic Plan. Most importantly, through our commitment to thoroughly prepare our

students for the challenges they will face, we link directly to the Strategic Plan's first goal: To Enrich the Educational Experience. In moving toward achieving our mission, we will of necessity be producing students who are thoroughly prepared to effectively contribute, regardless of their chosen career path, to both private and public policy debates. This serves not just the purposes of the students, their families and employers but also the entire local community as a more economically literate local community will advance economic development through better policy development. FAU's Strategic Plan's second primary goal is 'To Inspire Research, Scholarship and Creative Activity". Once again, our mission ties directly in. We have been and continue to increase our research standards and output. The data below will clearly attest to the progress we are making in this area. And, as mentioned above, it is only through faculty success in their research activities that they will retain the currency and fluency to fully prepare our students and thus reinforce our efforts with respect to achieving the first goal discussed above. Finally, we tie directly to the University's third primary Strategic Plan goal to 'Increase FAU's Community Engagement' most directly through our Center for Economic Education. The Center provides many connections to the general K-12 community through presentations, workshops, guest speakers and the like. As such, our commitment to improving the economic literacy of the K-12 community serves the first goal as well in that the greater the economic literacy of incoming students, the more value we can add while they are with us increasing their chances for success as well as providing for better made public policy decisions that ultimately increase the economic and cultural development of the South Florida region.

B. Date and description of last external (i.e. accreditation) review, if applicable, and last review of this program

- 1. Findings and recommendations
- 2. Major changes made since last review

The last major review of the program was entirely handled within the College of Business, where the department is housed, in 2007. At that time, no major changes were indicated. However, consistent with our mission, we have, on our own regularly considered changes effecting both students and faculty. From the student perspective, we have grown our undergraduate majors from roughly 75 to more than 700 over the past 10 years. To accommodate this influx of students we have streamlined our offerings by eliminating tracks or concentrations which has allowed us to broaden the number and types of classes being offered. Most importantly, we have added courses in mathematical economics, game theory and econometrics. These should prove invaluable to our students' ability to produce, interpret and present their findings concerning public policy questions at the local, national and international levels. Similar changes have been made

in our MS program which has witnessed dramatic growth in the size of the program and the quality of incoming students over the past seven years. In each case, more thorough discussion can be found in Section C: Instruction. Finally, since the last review, we have expressly placed greatly increased emphasis on the quantity of high-quality research produced by faculty. This has led to a major increase in our contributions to contemporary economic thinking, which, of course, feeds back into the classroom reinforcing the first two items mentioned. In each case, the task is ongoing.

C. Instruction: The self-study should address all aspects of programmatic quality associated with instruction. Special attention should be paid to curriculum, degree programs, and teaching quality. Student issues such as advising, retention, honors programming, occupational outcomes and placement in graduate schools should be addressed.

Departmental Dashboard Indicators

•	☐Establishment of goals for student learning (Refer to the program's latest
	plan in the FAU)
•	☐ Assessment Database, and for baccalaureate programs, attach a copy of
	ALC/SLO) Assessment of how well students are achieving expected learning
	outcomes (Refer to the program's latest report in the FAU Assessment Database)
•	Description of how results of assessments are used for continuous program
	improvement

1. Establishment of Goals for Student Learning

The establishment of goals for student learning flow directly from our Academic Learning Compact (ALC), a full copy of which is found in Appendix 1. Here, I'll identify specific items from the ALC and indicate how we convert those into operationalized goals for student learning.

Individual Items from the ALC

a. CONTENT KNOWLEDGE (Declarative): Students in Economics will demonstrate an understanding of concepts, theories, and facts about the behavior of consumers, firms, the role of prices in resource allocation and the impact of the behavior of consumers, firms and governments on the level of income, employment and inflation in the economy.

In order to achieve this goal, all economics students will complete examinations in several required courses that will assess their mastery of the content of the discipline: ECO 3101 (Intermediate Microeconomics), ECO 3203 (Intermediate Macroeconomics) and one of the three

international economics courses (ECS 3013: International Economic Development; ECO 4704: Economics of International Trade; or ECO 4713: International Monetary Economics). ECO 3101 and 3203 will cover the broad content of the economics discipline and the international course will expand the student's understanding of the international economy.

b. CONTENT KNOWLEDGE (Technical Skills): Students in Economics will demonstrate an understanding of statistical techniques applied to economic theories and data using an econometrics computer package.

We attempt to achieve this goal through students completing ECO 4421 (Introduction to Econometric Methods). In this class students will complete a written research project that requires the application of an econometric technique to economic data using a modern econometrics computer package. This course will assess the students' technical skills by means of examinations and the research project completed by the student.

c. COMMUNICATION SKILLS (Written Communication; Oral Communication):

To accomplish this goal, students in Economics will write about concepts and theories in economics in a grammatically correct and logically consistent manner. Students will make a classroom presentation about an economic issue that is clear, comprehensive, and demonstrates knowledge of the relevant economic concepts and theories.

d. CRITICAL THINKING SKILLS (Analytical Skills):

Students in Economics will demonstrate an ability to identify economic problems and issues, review relevant economic theories and analyses, and formulate and support their own conclusions.

We approach this goal in ECO 4933 (Cases in Economic Analysis). In this class students will complete one or more research papers and classroom presentations in which they will identify an economic problem or issue, review relevant economics literature, and contain the student's own conclusions and the basis for those conclusions.

3. Assessment Database and Continuous Improvement

The objectives of assessment in the undergraduate program in economics are:

- a. To assure student achievement in baccalaureate degree programs
- b. To provide increased access to higher education
- c. To meeting Statewide Professional and Workforce Needs
- d. To prepare Florida Atlantic University students to transition competitively into the workforce through partnerships with business and industry
- e. Building a State-Of-The-Art Information Technology Environment
- 1. Assessment is completed annually, with the above objectives assessed as outlined below which summarizes our last rounds of assessment. The expectation is that more than 50% of economics majors will meet or exceed the standards.
 - a. Assessment of Content Knowledge

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(Goals 1, 2, 3, and 4)
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Students completed a multiple choice exam in the capstone course ECO 4933. The exam was composed of questions drawn from a single database. Faculty in the department teaching ECO 4933 developed and maintained the database of questions. Results of the tests were shared with faculty in the department.

Each exam was classified into one of the following three categories: exceed standards, meet standards, and fail to meet standards. The definition of each category is as follows.

Exceed standards: 75% or more of questions answered correctly.

Meet standards: Less than 75% but 50% or more of the questions answered correctly.

Fail to meet standards: Less than 50% of the questions answered.

Generally, between 85% and 90% of the students met or exceeded the standards.

a.1. Continuous Improvement.

For improvement, faculty were instructed to reinforce particular areas of the microeconomics curriculum.

b. Assessment of Procedural Knowledge, Communication, Critical Thinking (creative skills), Communication (written and oral communication)

(Goals 1, 2, 3, 4, and 5)

Students wrote a research paper in the capstone course, ECO 4933. Faculty teaching ECO 4933 evaluated the research papers that were categorized as follows:

Exceed standards: Provided only relevant background information, used high quality resources and reference materials, applied the proper methodology for analysis, examples demonstrated above average grasp of the appropriate theory/principles/methodology.

Meet standards: Provided sufficient relevant background information and very little extraneous content, used quality resources and reference materials, applied the proper methodology for analysis, examples demonstrated satisfactory grasp of the appropriate theory/principles/methodology.

Fail to meet standards: Provided insufficient relevant background information and had significant extraneous content, relied on questionable resources and reference materials, failed to apply the proper methodology for analysis, examples did not demonstrate satisfactory grasp of the appropriate theory/principles/methodology.

Generally, between 90% and 95% of the students met or exceeded the standards. The high rate is caused by the fact that the assignment was completed in stages with oversight from the instructor

b.1. Continuous Improvement

For improvement, faculty were encouraged to give more term papers and to stress the methodology involved in writing papers

c.. Assessment of Oral Communication Skills

Students gave oral presentations during class in ECO 4933. The oral presentations were classified into one of the following three categories.

Exceed standards: Rehearsed and memorized speech, maintained eye contact with audience, spoke clearly and audibly with no distracting gestures or fillers, used visual aids appropriately, made clear and relevant points, excellent organization, and answered questions effectively.

Meet standards: Read parts of the speech, made occasional eye contact with audience, spoke clearly and audibly most of the time with minimal distracting gestures or fillers, too fast or too slow in a few parts, used interesting visual aids with few mistakes, highlighted the main points well, satisfactory organization, and answered questions adequately.

Fail to meet standards: Read the speech, little eye contact with audience, mumbled or was inaudible with too many distracting gestures or fillers, pace was erratic, used boring or inappropriate visual aids (if any), raised convoluted or irrelevant points, disorganized, and failed to answer questions adequately.

c.1. Continuous Improvement

No recommendation is usually given for this section as the results are extremely good.

d. Assessment of Analytical Skills

(Goals 1, 2, 3, 4, and 5)

Students demonstrated the ability to apply economic theory in the form of critical analysis of a particular topic and argue a position.

Students were required to write a position paper in ECO 4933. Students and the instructor selected a social issue or problem, identified relevant economic theories, and then applied theory to develop and defend a position on the topic. The professor assigned each paper to one of the following three categories:

Exceed standards: Accurately interpreted information/evidence/data, identified relevant issues, analyzed and weighed the key options, justified assumptions and reasons, drew logical conclusions.

Meet standards: Accurately interpreted information/evidence/data, identified most of the relevant issues, analyzed and weighed the obvious options, provided justification for assumptions and reasons, drew conclusions with few logical gaps.

Fail to meet standards: Misinterpreted information/evidence/data, overlooked relevant issues, provided superficial analysis of the options, failed to justify assumptions and reasons, drew conclusions with inadequate logical support.

Generally, between 80% and 90% of the students met or exceeded the standards.

d.1 Continuous Improvement

To improve performance, faculty were encouraged to give more essays in which economic theories were applied.

e. Assessment Database

To give a more precise overview of our recent assessment outcomes, below are listed the summary outcomes of the assessment for the last 3 academic years.

e.1. Assessment of Content Knowledge

2012-2013

Class Size = 65

32 students or 49.2% exceeded the standards

23 students or 35.4% met the standards

10 students or 15.4% failed to meet the standards

2011-2012

Class Size = 52

23 students or 44.2% exceeded the standards

20 students or 38.5% met the standards

9 students or 17.3% failed to meet the standard

2010-2011

Class Size = 37

19 students or 51.3% exceeded the standards

17 students or 45.9% met the standards

1 student or 2.7% failed to meet the standard

e.2. Assessment of Procedural Knowledge, Communication, Critical Thinking (creative skills), Communication (written and oral communication)

2012-2013

Class Size = 65

47 students or 72.3% exceeded the standards

11 Students or 16.9% met the standards

7 Students or 10.8% failed to meet the standards

2011-2012

Class Size = 52

42 students or 80.1% exceeded the standards

8 Students or 15.3% met the standards

2 students or 3.8% failed to meet the standards

2010-2011

Class Size = 37

21 students or 56.8% exceeded the standards

13 Students or 35% met the standards

3 students or 8.1% failed to meet the standards

e.3 Assessment of Oral Communication Skills

2012-2013

Class Size = 65

52 Students or 80.0% exceeded expectations

13 students or 20.0% met the standards

2011-2012

Class Size = 52

38 Students or 73.0% exceeded expectations

11 students or 21.2% met the standards

3 students or 5.8% failed to meet the standard

2010-2011

Class Size = 37

25 Students or 67.3% exceeded expectations

10 students or 27.3% met the standards

2 students or 5.4% failed to meet the standards

e.4 Assessment of Analytical Skills

2012-2013

Class Size = 65

30 students or 46.2% exceeded the standards

24 students or 36.9% met the standards

11 students or 16.9% failed to meet the standard

2011-2012

Class Size = 52

33 students or 63.5% exceeded the standards

10 students or 19.2% met the standards

9 students or 17.3% failed to meet the standard

2010-2011

Class Size = 37

30 students or 81.1% exceeded the standards

1 student or 2.7% met the standards

6 students or 16.2% failed to meet the standard

Baccalaureate Programs: *Please include the following information for degree programs.*

• Review of lower level prerequisite courses to ensure that the program is in

	compliance with State-approved prerequisites
•	For limited access programs, review of whether such status is still
	warranted
•	☐Admissions criteria
•	☐ Enrollment information (headcount and SCH production)
•	☐ Average class size and faculty/student ratio
•	☐Curriculum, including duration of program and comparison to peer
	programs, as identified by the unit (including aspirational peers and SUS)
•	Description of internships, practicum, study abroad, field experiences
•	Pedagogy/Pedagogical innovations (for example, eLearning, simulations,
	student-centered approaches, and so on)
•	Scope of institutional contributions, such as to the Intellectual Foundations
	Program, cross-listed courses, "service courses", inter-professional education
	efforts, certificate programs
•	Student profile, including student diversity and demographics, scholarly
	activity, number of students receiving scholarships and assistantships, and
	recruitment strategies
•	☐ Advising procedures
•	Licensure rates (if applicable)
•	Placement rates/employment profile
•	Retention rates
•	Graduation rates
•	Student recruitment

Florida Atlantic University is one of 13 state universities making up the State University System. At FAU, the economics program is administratively housed is the College of Business where students are only admitted after meeting the following requirements:

- 1. Having earned 60 credit hours.
- 2. Hold a minimum FAU-GPA of 2.5 (the economics concentrations requirement is an FAU-GPA of 2.0 and is thus open access).
- 3. Complete a 2 year foreign language program in high school or the equivalent proficiency at the university level.
- 4. Complete the following foundation course work with a minimum of a "C:
 - a. ACG 2021 Principles of Accounting I
 - b. ACG 2071 Principles of Accounting II
 - c. ECO 2013 Macroeconomic Principles
 - d. ECO 2023 Microeconomics Principles
 - e. ISM 2000 Information Systems Fundamentals
 - f. STA 2023 Statistics
 - g. MAC 2233 Methods of Calculus

As is very typical when economics is in a college of business, the program offers two undergraduate degree paths. The general economics concentration leads to a B.S. degree and has a broad liberal arts/social science underpinning while the business concentration leads to the

B.B.A. degree and requires completion of the business core. Each requires the University-wide minimum GPA of 2.0 for admission and are thus open access. Each program has a minimum requirement of 120 credit hours (fully detailed degree requirements can be found in Appendix 2). Finally, at the graduate level, the program offers coursework leading to the MS degree (discussed in detail below).

1. Enrollment Information

The two most interesting aspects off student enrollment information in the department are its enormous growth in majors and the continued diverse nature of our students. In 2008/9 we had a total of 257 majors which grew to 724 by 2012/13 for a percentage increase of 182%. The Table below tracks this growth by ethnicity and gender. The university does not offer this data broken down by the two concentrations listed above (General and Business Economics) thus the data reflect the ethnicity *and* number of majors for the two concentrations combined. In addition, the SCH data are Annualized State Funded Student Credit Hours.

Year	Ethnicity	Number of Majors	SCH
2008/9	American Indian/Alaskan Native	0	
	Asian or Pacific Islander	9	
	Black (Not of Hispanic Origin)	51	
	Hispanic	61	
	White (Not of Hispanic Origin	120	
	Non-Resident Alien	14	
	Not Reported	2	
	Total	257	371.1
2009/10	American Indian/Alaskan Native	0	
	Asian or Pacific Islander	25	
	Black (Not of Hispanic Origin)	102	
	Hispanic	133	
	White (Not of Hispanic Origin	237	
	Non-Resident Alien	17	
	Not Reported	4	
	Total	518	434.9
2010/11	American Indian/Alaskan Native	0	
	Asian or Pacific Islander	32	
	Black (Not of Hispanic Origin)	126	
	Hispanic	158	
	White (Not of Hispanic Origin)	275	
	Non-Resident Alien	17	
	Not Reported	3	
	Total	614	454.6

2011/12	American Indian/Alaskan Native	3	
	Asian or Pacific Islander	34	
	Black (Not of Hispanic Origin)	142	
	Hispanic	126	
	White (Not of Hispanic Origin	287	
	Non-Resident Alien	15	
	Not Reported	3	
	Total	610	437.8
2012/13	American Indian/Alaskan Native	0	
	Asian or Pacific Islander	35	
	Black (Not of Hispanic Origin)	158	
	Hispanic	170	
	White (Not of Hispanic Origin	326	
	Non-Resident Alien	8	
	Not Reported	27	
	Total	724	488.9

Percent Female

The percentage of majors who are female has remained remarkably consistent over the period, ranging between 41.3% in 2011/12 and 45.7 in 2009/10.

2. Average Class Size and Student/Faculty Ratio

The Table below gives the data for mean class sizes and mean student/faculty ratios for the 2009/10-2012/13 time period. It should be noted that as part of the College of Business Common Core, these data omit all courses in Money and Banking ECO 4223. And given that admission to the College of Business requires completion of 60 credit hours the data omits ECO 2013 Macroeconomic Principles and 2023 Microeconomic Principles. Thus the first Table reflects all undergraduate classes in economics leaving out ECO 4223, ECO 2013 and ECO 2023 while the second is the data for the ECO 4223 sections offered.

Year	Mean Class Size	Mean Student/Faculty Ratio
2009/10	38.3	28.7:1
2010/11	34.7	27.3:1
2011/12	36.6	27.5:1
2012/13	36.9	36.4:1

Year	Mean Class Size (ECO 4223)	Mean Student/Faculty Ratio (ECO 4223)
2009/10	57.7	47.6:1
2010/11	58.0	67.0:1
2011/12	53.2	64.8:1
2012/13	80.9	65.3:1

During the period, it is important to note that while mean class size fell slightly, the mean student/faculty ratio rose substantially. This clearly points to a faculty resource shortage that will be discussed more thoroughly in the Faculty section below.

3. Curriculum

Both the general economics and business economics concentrations require a minimum of 120 credit hours for the degree. Further, each requires satisfactory completion of the university-wide Intellectual Foundation Program which includes coursework in English, Natural Science, Math and Quantitative Reasoning, Global Citizenship, Creative Expression and Society and Human Behavior. Also in common, each concentration requires satisfactory completion of the following Pre-Business Foundation Courses:

ACG 2021 Principles of Accounting I

ACG 2071 Principles of Accounting II

ECO 2013 Principles of Macroeconomics

ECO 2023 Principles of Microeconomics

ISM 2000 Information Systems Fundamentals

STA 2023 Statistics

MAC 2233 Methods of Calculus.

At this point the two concentrations diverge. Students in the business economics concentration are required to satisfactorily complete the Business Core which includes:

MAN 3025 Management and Organizational Behavior

MAR 3023 Marketing Management

FIN 3403 Financial Management

BUL 4421 Business Law 1

GEB 3213 Communication Business Information or ENC 3213 Writing for Management

ISM 3011 Management Information Systems

QMB 3600 Quantitative Methods in Administration

MAN 3506 Operations Management

MAN 4720 Global Strategy and Policy.

Further, students in this concentration must satisfactorily complete 2 additional business electives at the 3000/4000 level. Finally, these students must satisfactorily complete:

ECO 3101 Intermediate Microeconomics or ECP 3703 Managerial Economics

ECO 3203 Intermediate Macroeconomics

ECO 4421 Introduction to Econometric Methods

One of three International Economics Courses (ECS 3013 International Economic Development, ECO 4704 Economics of International Trade and ECO 4713 International Monetary Economics)

Two additional economics courses at the 3000/4000 level

ECO 4933 Cases in Economic Analysis.

Those students in the general economics concentration replace the Business Core with:

ECO 3101 Intermediate Microeconomics OR ECP 3703 Managerial Economics

ECO 3203 Intermediate Macroeconomics

ECO 4421 Introduction to Econometric Methods

One of the three International Economics Courses listed above

Four additional economics courses at the 3000/4000 level

ECO 4933 Cases in Economic Analysis

Four courses from Social Science cognates.

Satisfy a foreign language proficiency either through 2 semesters of college level course work OR equivalent native competency.

In addition, for all students, the department offers study abroad tours each summer (one at the bachelor's level and one at the graduate level). These one-week tours are the most popular study abroad programs offered in the College of Business and have been running for over 12 years with approximately 500 students participating. These tours offer students an in-depth look at how multinational corporations and local corporations operate in Latin America. The tours focus on broad industries including telecommunications, agriculture, medical devices, call centers and ecotourism.

Throughout the above, it is assumed that each course is 3 credits—which is the standard. Further, a review of the lower level prerequisites find them to be in compliance with State-approved prerequisites and again, a review of the two concentrations relative to other Economics Departments' programs (peer, aspirational peers and SUS) show our programs to be quite standard, especially for departments housed administratively in a college of business. A copy of the curriculum can be found in Appendix 2.

4. Pedagogy/Pedagogical Innovations

The department has been among the leaders in the college in terms of applying new technologies to the classroom and course work. Over the past 5 years, we have moved aggressively in the direction of offering Lecture/Capture Video Streaming (LCVS) courses which have roughly seating for 50 students and online access to hundreds of others. While we are still in the process of rolling these classes out, we are increasing the number of students who can access the courses online—currently, we have several classes with 300+ students. We currently offer LCVS in ECO 2013 Introduction to Macroeconomics, ECO 2023 Introduction to Microeconomics and ECO 4233 Money and Banking. A sense of our commitment this delivery mechanism is found by noting that the coordinator for LCVS in the College of Business is a faculty member in economics. A second new application of technology in the classroom involves our use of statistical labs in both ECO 4421 Introduction to Econometric Methods and 4422 Intermediate Econometrics. The College of Business made the commitment within the last 5 years to provide lab space with appropriate computing technology and equally importantly, with cutting edge econometric software—the same as used by the faculty in their own research (STATA). While the first saves us faculty resources and opens our course to far more students than could otherwise be served, the latter insures that our students will have the analytical skills to be successful in the job market or as they pursue graduate education.

5. Advising and Recruiting Procedures

All advising of undergraduates in the College of Business is centralized and as such, while informal advising about courses, careers and the like take place on a one-on-one basis between faculty and student, we have no formal, department-wide part in advising. Similarly, the department does not formally recruit students. The reason for this is simply that faculty resources have not grown to match the growth in majors as discussed above. At present, we are in the enviable position of having as many students as we can accommodate. (And at the MS level, we have raised entrance requirements both due to our limited faculty resources and to improve the quality of the incoming students).

6. Placement Rates/Employment Profiles

To date, the department has not maintained a database to track our students' success. We

do see this as an area of need in the department. At present, however, we lack the human resources necessary to create such a database.

7. Graduation, Retention and Persistence Rates

The department conducted student performance analysis by focusing on Graduation, Retention and Persistence Rates. **Graduation Rate** is the percentage of students who graduated from an initial group of students in a given year. (Graduation Rate = total graduated/initial start group). **Retention Rate** is the percentage from an initial group of students in given year who enroll in the following year. (Retention Rate = total enrolled / initial start group). Finally, the **Persistence Rate** is the percentage of students from a given year who have graduated or are still enrolled. (Persistence Rate = (total graduated + total enrolled)/initial start group)). All rates were tracked for 10 years to give a more encompassing view of student performance.

The University's Institutional Effectiveness Analysis (IEA) databases caused serious limitations in analysis as only Transfer students (with an AA and without AA) could effectively be tracked. Unfortunately, the College of Business' process of declaring a major does not correlate with metrics designed by IEA for reporting and assessment purposes. Specifically, IEA data are lacking because they cannot track FTIC (First Time in College) students in the College of Business. The reason is that in 2007 the College of Business created a requirement that students can only declare a Business major after earning 60 credits. Similarly, the IEA system only tracks new students declaring a major. Therefore, IEA could not track College of Business students who initially started at FAU as freshman and declared a major two years later after earning 60 credits. As such, only 120 ECON students were tracked between 2002 and 2008 (equally split between the General and Business Econ concentrations). Due to the small sample size, year-to-year comparisons are not statistically significant; however, taken as a whole, the data give as clear and accurate impression of the program as possible.

A. Graduation Rates

1. Business Economics:

For those in the restricted sample (as discussed above), the following Graduate Rates apply:

- a. Approximately 48% of transfer students who declared ECOB when entering FAU graduated in 3 years or less.
- b. Approximately 59% of transfer students who declared ECOB when entering FAU graduated in 4 years or less.

- c. Approximately 64% of transfer students who declared ECOB when entering FAU graduated in 5 years or less.
- d. Beyond 5 years, (i.e. 6-10 years after matriculating at FAU) approximately 77% of transfer students who declared ECOB when entering FAU had graduated

In sum, approximately 23% of transfer students who declared ECOB when entering FAU from 2002-2006 did not earn a degree from FAU within 6-10 year though 13% were still pursuing the degree 6-8 years after matriculating (none continued beyond the 8th year). Two points are essential to raise here. First, it must be recalled that the data are based on only 60 observations due to the way in which the IEA collects the data and the fact that a student is only admitted to the College of Business after completing 60 credit hours. And second, these graduation rates, even after recognizing the sample size's small number, are reasonably consistent with those in other departments in the college.

2. General Economics:

Again, for those in the restricted sample, the following Graduation Rates apply:

- a. Approximately 39% of transfer students who declared ECONG when entering FAU graduated in 3 years or less.
- b. Approximately 43% of transfer students who declared ECONG when entering FAU graduated in 4 years or less.
- c. Approximately 50% of transfer students who declared ECONG when entering FAU graduated in 5 years or less.
- d. Beyond 5 years, (i.e. 6-10 years after matriculating at FAU) no students graduated who declared ECONG when entering FAU graduated.

In sum, approximately 48% of transfer students who declared ECONG when entering FAU from 2002-2006 did not earn a degree from FAU within 6-10 years.

At first glance, these appear to be rather paltry rates of graduation, even when compared with the Business Economics degree. However, while the degree has a relatively low graduation rate compared to other programs in the college, this is not necessarily a reflection of the quality of students or teaching, but rather a result of the General Economics program's unique status within the College of Business. Many students who have not met the requirements to declare a major with the Business Core component are directed to either the Pre-business program (if under 72 credits) or the General Economics program (if 72 credits or more) as a temporary assignment until all requirements are met to declare the desired major. This is permitted because the General Economics program does not require the Business Core. Clearly, this process downwardly affected graduation rates in General Economics.

B. Retention Rates

1. Business Economics:

For those in the restricted sample (as discussed above), the following Retention Rates apply:

- a. 100% of transfer students who declared ECOB when entering FAU were still enrolled through the following 3 years or less.
- e. Approximately 67% of transfer students who declared ECOB when entering FAU were still enrolled through the following 4 years.
- f. Approximately 33% of transfer students who declared ECOB when entering FAU were still enrolled through the following 5 years.

2. General Economics:

Again, for those in the restricted sample, the following Retention Rates apply:

- a. 25% of transfer students who declared ECONG when entering FAU were still enrolled through the following 3 years or less.
- b. 25% of transfer students who declared ECONG when entering FAU were still enrolled through the following 4 years.
- b. B when entering FAU were still enrolled through the following 3 years or less.
- g. Approximately 67% of transfer students who declared ECO when entering FAU were still enrolled through the following 4 years.
- h. Approximately 33% of transfer students who declared ECO when entering FAU were still enrolled through the following 5 years.

While the data on retention, for both degrees, seem rather low, it should be recalled that as students graduate they of necessity do not re-enroll in the following year. Thus, as graduation rates increase over time, retention rates naturally fall. To get a more complete picture of retention, we consider persistence rates for the same time period.

C. Persistence Rates

1. Business Economics:

For those in the restricted sample (as discussed above), the following Persistence Rates apply:

- a. 100% of transfer students who declared ECOB when entering FAU had either graduated or were still enrolled through the following 3 years or less.
- b. 100% of transfer students who declared ECOB when entering FAU had either graduated or were either still enrolled through the following 4 years.
- c. 100% of transfer students who declared ECOB when entering FAU had either graduated or were still enrolled through the following 5 years.

2. General Economics:

Again, for those in the restricted sample, the following Persistence Rates apply:

- a. 50% of transfer students who declared ECONG when entering FAU had either graduated or were still enrolled through the following 3 years or less.
- b. 50% of transfer students who declared ECONG when entering FAU had either graduated or were still enrolled through the following 4 years.
- c. 38% of transfer students who declared ECONG when entering FAU had either graduated or were still enrolled through the following 5 years.

Persistence, since it takes into account both those who graduate and those who are still pursuing their degrees, paints a clearer picture than does retention alone. While the persistence rates are below most departments in the college, this is most likely due to the unique nature that our programs play in the college, as discussed above. However, the department does see increasing graduation and persistence as areas that will require closer monitoring in the future to ensure that falling retention rates have more to do with increasing graduation rates than students simply leaving FAU.

Graduate Programs: *Please include for each degree program.*

•	For limited access programs, review of whether such status is still
	warranted
•	☐Admissions criteria
•	☐ Enrollment information (headcount and SCH production)
•	☐ Average class size and faculty/student ratio
•	☐Curriculum, including duration of program and comparison to peer
	programs, as identified by the unit (including aspirational peers and SUS)
•	Description of internships, practicum, study abroad, field experiences
•	☐Pedagogy/Pedagogical innovations (for example, eLearning, simulations,
	student-centered approaches, and so on)
•	Scope of institutional contributions, such as cross-listed courses, "service

	courses", inter-professional education efforts, certificate programs
•	☐Student profile, including student diversity and demographics, scholarly
	activity, number of students receiving scholarships and assistantships, and
	recruitment strategies
•	☐ Advising procedures
•	☐Licensure rates (if applicable)
•	☐Placement rates/employment profile

The Department offers course work leading to the MS degree in Economics. The program is limited access in the sense that students must satisfy a set of rigorous admissions criteria as described below. The purpose here is not to limit the size of the program or its growth but rather to maintain and periodically increase the quality of incoming students.

1. Admissions Criteria

The MS program has a rigorous set of admissions criteria to ensure that students are adequately prepared for graduate studies in economics. These admissions criteria include:

- a. Undergraduate GPA of 3.0 from a regionally accredited college or university
- b. Minimum GMAT score of 500 or GRE score of 150 (verbal), 150 (quantitative), and 4 (analytical writing)
- c. An interview with the program coordinator (strongly recommended)

2. Enrollment information (headcount and annual SCH production)

	Headcount	Annualized Student Credit Hours
Fall 2010:	47	
Spring 2011:	40	Total 30.4
Fall 2011:	62	
Spring 2012:	72	Total 36.7
Fall 2012:	66	
Spring 2013:	55	Total 33.0

3. Average Class Size and Student/Faculty Ratio

Year	Mean Class Size	Mean Student/Faculty Ratio
2009/10	19.2	10.8:1

2010/11	21.4	14.6:1
2011/12	25.3	16.1:1
2012/13	19.7	13.5:1

4. Curriculum

The curriculum is based on 30 credits, which can be completed in as few as 12 months or spread over several years. The curriculum is based on a selection of three concentrations: General Economics, Financial Economics and International Economics. Each concentration requires the following coursework:

Completion of four core courses: ECO 6115 (Advanced Microeconomics), ECO 6206 (Advanced Macroeconomics), ECO 6403 (Advanced Mathematical Economics), and ECO 6246 (Advanced Econometrics)

Completion of two field courses: Based on concentration chosen Completion of two business courses: Based on concentration chosen Completion of two program electives

Students may elect to pursue a thesis which counts as 6 credits (2 courses), an independent study for 3 credits (1 course), or the international field experience for 3 credits (1 course).

The MS Program in Economics is unique in the state of Florida as the only Masters program in economics offered by a non-Ph.D. granting department. Because all of our graduate program curriculum was designed and our resources dedicated only to MS-level students, we are able to attract very high-quality candidates.

5. Description of internships, practicum, study abroad, field experiences

As with the undergraduate program, the MS program offers an annual international field experience to Costa Rica each May, in between the Spring and Summer terms. These one-week tours are the most popular study abroad program offered in the College of Business. The tours have been running for over 12 years, and approximately 500 students have participated. The tours offer students an in-depth look at how multinational corporations and local corporations operate in Latin America. The tour focuses on broad industries including telecommunications, agriculture, medical devices, call centers, and ecotourism.

Recent tours and the number of participants:

2013 Costa Rica Study Tour (May 3 - 10): 25 participants 2012 Costa Rica Study Tour (May 4 - 11): 32 participants

6. Pedagogy/Pedagogical innovations

The department has adopted STATA as the primary econometrics software that all MS students learn. STATA projects are incorporated in various courses throughout the program. For econometrics courses (Advanced Econometrics and Topics of Econometrics), a classroom laboratory is utilized allowing students to learn econometrics tools to apply to various problems and projects.

7. Advising Procedures

The MS program offers extensive and personal advising by the Program Coordinator, Ms. Oksana Weaver, and the Program Director, Dr. Eric Chiang. A description of advising procedures is as follows:

- a. Each student is interviewed by Ms. Oksana Weaver prior to acceptance into the
- b. Each student meets with Ms. Oksana Weaver upon acceptance into the program, and signs a document stating that the curriculum and policies are understood.
- c. Throughout the program, dedicated support from Ms. Weaver and Dr. Chiang provide students with a smooth experience.

8. Placement Rates/Employment Profile

Graduates from the MS Economics program achieve employment at a wide range of companies, government organizations, and academic institutions. Surveys of alumni are conducted annually to determine job situation. A list of professions by alumni include:

2010 – 2011 MS Economics Graduates

- -Database Developer at Office Depot
- -Instructor at Miami-Dade College
- -Economist, Bureau of Labor Statistics
- -Pricing Analyst at Liberty Power
- -Junior Relationship Officer Regional Trade at United Bank for Africa
- -CEO of MedWhat.com
- -Marketing Analyst at Perry Ellis International
- -Staff Accountant at Gravitec Systems, Inc.
- -Manager of East Coast Valet and Concierge at One Watermark Place
- -Senior Product Planning Analyst at Motorola Solutions

2011 – 2012 MS Economics Graduates

- -Financial Analyst at Office Depot
- -Trading Analyst at NextEra
- -Ph.D. Student in Finance at FAU
- -Instructor at Broward College

- -Compliance Examiner in Financial Industry Regulatory Authority
- -Ph.D. Student in Economics at Florida International University
- -Senior Portfolio Manager at UBS Private Wealth Management
- -Investment Analyst at Bourse Securities Limited
- -Realtor at Balistreri Realty
- -Senior Data Analyst at AssistRX
- -Economic Analyst at Mather Economics
- -Strategic Operations Analyst at Liberty Medical Supply
- -Accountant at Broward County Government

2012 – 2013 MS Economics Graduates

- -Assistant Professor at Lynn University
- -Associate Financial Advisor at Northwestern Mutual
- -Instructor at Palm Beach State University
- -Instructor at Miami-Dade College
- -Branch Team Leader at Regions Bank

9. Retention Rates

Because we are selective in our admissions process, our retention rates are high. The number of students entering the MS Economics program and continuing into their second semester term of the one-year full time program are:

```
Fall 2010: 13 entered MS program; 9 continued 2<sup>nd</sup> semester (69.2%)
Spring 2011: 10 entered MS program; 8 continued 2<sup>nd</sup> semester (80.0%)
Summer 2011:9 entered MS program; 9 continued 2<sup>nd</sup> semester (100.0%)
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2010 – 2011 Retention Rate: 26 of 32 MS students = 81.25%
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Fall 2011: 23 entered MS program; 17 continued 2<sup>nd</sup> semester (73.9%) Spring 2012: 27 entered MS program; 19 continued 2<sup>nd</sup> semester (70.4%) Summer 2012:7 entered MS program; 7 continued 2<sup>nd</sup> semester (100.0%)
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2011 – 2012 Retention Rate: 43 of 57 MS students = 75.43%

Fall 2012: 16 entered MS program; 11 continued 2nd semester (68.8%) Spring 2013: 11 entered MS program; 7 continued 2nd semester (63.6%) Summer 2013: 4 entered MS program; 4 continued 2nd semester (100.0%)

2012 – 2013 Retention Rate: 22 of 31 MS students = 70.97%

10. Graduation Rates

The number of MS Economics graduates by academic year has grown every year. As a measure of our growth, between 2006 and 2009 (three academic years), a total of 20 students received an MS Economics degree. Between 2010 and 2013 (three academic years), a total of 75 students received an MS Economics degree, an increase of 275% in a four year period.

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2010 – 2011: 22 MS Economics Degrees Awarded 2011 – 2012: 25 MS Economics Degrees Awarded 2012 – 2013: 28 MS Economics Degrees Awarded
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11. Student Recruitment

Extensive recruitment efforts are undertaken each year to attract the very best students possible. A summary of recruitment efforts include:

a. Application for the FAU Graduate Recruitment Grant. Amounts received are:

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2010 – 2011: $2,000 + 2 Provost Fellowship
2011 – 2012: $2,000 + 1 Provost Fellowships
2012 – 2013: $2,000 + 2 Provost Fellowships
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b. Biannual Open House and Welcome Events: These are held in April and November of each year, and involve the cooperation of the faculty and current graduate assistants to welcome new and prospective students to the MS program. A typical program includes:

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11:30 – 12:00pm: Lunch
12:00 – 12:30pm: Welcome by the Graduate Director and Program Coordinator
12:30 – 1:00pm: Meet Our Current Students (session hosted by current graduate assistants)
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1:00 – 1:30pm: Meet the Faculty (session hosted by economics faculty) 1:30 – 2:00pm: Campus Tour (led by current graduate students)

Classroom Visits: Each semester, every upper-division Economics course is visited by either the Graduate Director, Program Coordinator, or a Graduate Assistant to introduce the MS program and to encourage students to apply.

c. Additional Recruitment Efforts: With the cooperation of major universities (such as University of Florida and Florida State University), we have been able to acquire email lists of graduating seniors with GPAs meeting our admissions requirements, from which we send information on our MS program. This has led to significant numbers of applications and students. Also, the Graduate Director maintains communications with Department Chairs and Undergraduate Coordinators at several key universities across the state to promote the MS program.

•	Administrative structure. Please describe the administrative structure of
	the school.
•	☐Profile, including diversity, rank, academic specialties, and mix between
	full and part-time faculty and how this meets or does not meet department
	needs
•	☐ Faculty teaching load and methods of calculation
•	☐Summary of faculty scholarship and research productivity, including
	grants and publications
•	☐Strategic planning for hires
•	Abbreviated vita for each full-time faculty member

1. Administrative Structure

The department is quite standard both relative to other economics departments in SUS as well as nationally. This is particularly true for departments that, as we, do not offer the Ph.D. The department is headed by a Chair, selected by the Dean of the College of Business with the input of the department. The Chair's primary role is administrative: scheduling of classes, hiring and evaluating faculty members and taking the lead role in establishing the department's incentive structure. There is no personnel or advisory committee and no external advisory board. Faculty fully participate in all decisions not expressly reserved to the Chair (such as faculty evaluation, scheduling and the like). Decisions for which there is shared responsibility (curricular issues, journal rankings, Tenure and Promotion Policy and the like) are made by a vote of the faculty including the Chair.

2. Faculty Profile

The faculty is composed of three parts: 1) tenure-earning; 2) non tenure-earning instructors and 3) adjuncts. Since the first 2 categories are full-time while adjuncts teach 1 or 2 classes per term with a lot of churning, the focus here is on the full-time faculty. The full-time faculty include:

Year	Faculty Member	Ethnicity/Gender	Rank	Specialization
2009/10	C. Register	White/Male	Professor	Public Policy/Natural Hazards
	M. Escaleras	Hispanic/Female	Associate	Public Policy/Natural Hazards
	E. Levy	White/Male	Instructor	Not Applicable
	K. Yuhn	Asian/Male	Associate	Macro/Econometrics
	E. Chiang	White/Male	Associate	Micro/Game Theory
	K. Banerjee	Asian/Male	Assistant	Math/Micro/Welfare
	A. Ellison	White/Male	Instructor	Not Applicable
	R. Rhodd	Black/Male	Associate	International/Econometrics

S. Vishwasrao	Asian/Female	Associate	International
W. Bosshardt	White/Male	Associate	Economic Education
S. Ghosh	Asian/Male	Associate	Labor/Micro
V. Volosovych	White/Male	Assistant	Macro/International
E. Van Tassel	White/Male	Associate	Macro/Finance
N. Manage	Asian/Female	Associate	Macro/Econometrics
G. Scott	Black/Male	Associate	International

- There were two faculty member changes in 2010/11: 1) Professor Volosovych left the university and 2) Ting Levy joined the department as a full-time Instructor (she is Asian/Female) and as such has no research assignment. There were no changes in Rank during the year.
- 2011/12 No changes from 2010/11.
- There were two changes from the 2011/12 roster: 1) G. Scott resigned and 2) Yongmin Zang joined the department as a full-time Instructor (he is Asian/Male) and as such has no research assignment. There were no Rank changes during the year.

As can be seen, even though our number of undergraduate majors increased from 518 in 2009/10 to 724 in 2012/13, the number of tenure-earning positions in the department has fallen from 13 to 11 (matters are much worse if the base is 2008/09 as we only had 257 undergraduate majors). Through use of full-time Instructors and extensive use of LCVS delivery and increasing teaching loads we have been able to hold our own in terms of instruction. Of course, the replacement of tenure-earning faculty with Instructors and increasing teaching loads threaten our ability to maintain the progress we have made, as discussed below, toward achieving our goals of increasing the quantity of high-quality research.

3. Faculty Teaching Load and Methods of Calculation

Teaching loads for tenure-earning faculty are based primarily on research productivity. Loads for tenure-earning faculty range from 2/2 to 4/4. This is clearly detailed in the Department's Teaching Load Policy which can be found in Appendix 3. It should be noted that due to resource constraints at the university level, this policy was revised during the period, effectively adding 1 class per year to each tenure-earning faculty member. Teaching loads for Instructors are fixed at the full-time level of 4/4.

4. Summary of Faculty Research Productivity Including Grants

The simplest way to summarize faculty research productivity is to refer to the most recent (to my knowledge) ranking of departments with respect to their faculty

publications in roughly the top-50 economics-related journals. This ranking can be found in M. McPherson, "Ranking U.S. Economics Programs by Faculty Publication: An Update Using 1994-2009 Data," <u>Southern Economic Journal</u>, Vol. 79, No. 1. This paper ranks nearly 250 economics programs in the U.S. To show the growth in research productivity in our department, consider that for the period 1994-2001 the department was ranked 212th. With renewed emphasis on the quantity of high-quality research, creation of a logically consistent incentive structure (teaching loads, annual evaluations, tenure and promotion reviews and the like) and through a number of productive new hires, we move up to 131st place in the ranking for 2002-2009. This 81 slot increase in our research ranking ties us for 3rd place in the U.S. in terms of slots gained across the period. Further, this gain moves us ahead of a number of programs which offer the Ph.D. as well as ahead of several schools in SUS that had been in front of our department in the earlier period.

The department has also had some success with respect to externally funded research. This has been entirely through our Center for Economic Education which will be discussed below.

5. Strategic Planning for New Hires

Given the extremely stretched nature of 13 full-time faculty attempting to cover over 700 undergraduate majors (and growing) as well as the thriving MS program, a summary strategic plan for hiring would be one of "take whatever" we can get. The enormous success discussed above in terms of research output is truly at risk as faculty have had to recently both teach more courses and a greater variety of courses to meet student needs. This is particularly true since over the 2009/10-2012/13 period, we have lost 2 tenure-earning faculty with research assignments and replaced them with 2 full-time Instructors who have no research assignment. Thus, the only strategic plan for hiring is to pursue tenure-earning lines, regardless of field, in lieu of additional Instructors. And given the relatively young nature of our department, hiring an experienced Professor with a high-level, active research agenda and an understanding of journal editorial practices would help mobilize our faculty to meet its potential.

6. Abbreviated CVs

These can be found in Appendix 4.

D. Departments/Schools should address their efforts at collaborating with internal and
external partners to promote both volume and quality of faculty and student research,
scholarship, creative achievements, and other forms of inquiry. They should report on
interdisciplinary efforts and those initiatives that promote economic development or
community engagement in the region.

	college faculty
,	☐ Interdisciplinary efforts and community engagement efforts
,	☐Establishment of goals for research
,	☐ Assessment of how well goals are being met

1. Review of Part II of Dashboard Indicators

The department has had limited success in collaborative efforts with internal and external partners to promote research and scholarship. This is not particularly uncommon in economics departments across the country. Faculty are active in terms of presenting their research at professional meetings, many of which are interdisciplinary in nature and can/do lead to collaborative efforts with faculty from other institutions and disciplines. Since 2009/10, the faculty (with research assignments) have averaged slightly more than 1 such presentation per year. With respect to seeking funding for research, the department has pursued and received some such support. The bulk of this support has come through the activities of the Center for Economic Education, which will be detailed below. In addition, however, and tied to the promotion of local/regional economic development, the department conducts modestly funded local area impact studies for various governmental agencies.

f. Interdisciplinary Efforts and Community Engagement Efforts

Once again, the department's primary community engagement efforts come through our Center for Economic Education which is discussed in detail below. The picture is a bit better with respect to interdisciplinary research efforts, with local/regional impacts. Two cases provide good examples. The first involves the internal but interdisciplinary research conducted on health care and international banking by Professor Vishwasrao and members of the management and finance departments—with the work in health care being of particular value in FL with its aging population. The second involves the primary research efforts of Professors Escaleras and Register in the area of natural disasters—Florida being especially vulnerable to hurricanes, flooding, beach erosion, lightning-sparked brush fires and windstorms. In each case, the work requires substantial inputs from the appropriate science field(s) and the resulting published papers could be placed in journals in those fields as well as economics.

g. Establishment of Goals for Research

The department recognizes its need to be a more active player in terms of engaging and contributing to the economic, social and political development of the local area/region. To date, other than some of the research produced by the Center for Economic Education and through the above mentioned local area impact studies that have been recently done primarily by Professor Rhodd, the department has focused

little attention on this area. Clearly, we need as a group to agree on how to proceed. Some ideas generated thus far are:

- a. Alter the incentive structure to encourage greater collaborative efforts with both internal and external partners to foster research and scholarship designed to address local/region needs.
- b. Alter the incentive structure to encourage the pursuit of external research support at the local/regional level recognizing and accepting that these opportunities may result in lower levels of funding than national funding sources provide.
- c. Increase research of the local area impact type. This might require hiring a regional economic forecaster.

E. Service/Community Engagement for Department/School – School or College Faculty

•	Discussion of community engagement including public service, special
	projects, service learning, and other services to the community
•	Review of Part III of the Departmental Dashboard Indicators for
	Department/School
•	☐Establishment of goals for service
•	☐ Assessment of how well goals are being met

The Department is active in service to the larger university and to the economics profession through participation on various university/college committees (roughly 2 per faculty member) and through provision of a great many reviewing projects for some of the very best journals in the field. As noted several times however, other than our local area impact research, our primary engagement and service to the community flows through the Center for Economic Education, directed by Professor Bosshardt. Here is an overview of the Center and how it serves the community:

The FAU Center for Economic Education

The mission of the FAU Center for Economic Education is to provide area educators access to new and innovative ways to teach economics in the K-12 classroom.

The FAU Center for Economic Education supports its mission in three ways:

- 1. The FAU Center provides workshops in economic education for its service area school districts.
- 2. The FAU Center's personnel participate in the development of teaching materials in economic education.
- 3. The FAU Center for Economic Education personnel conducts research into the effectiveness of economic education materials, programs, and techniques.

Workshops:

The Center for Economic Education works closely with the school districts in Palm Beach and Broward counties. The districts offer professional development events (workshops) to keep their teachers current in their subjects. The district sometimes uses their own personnel to conduct these workshops, but will rely on local universities to help offer workshops on a broader range of subjects. Economics is a subject in which the number of qualified teachers is limited and the number of economics trainers minimal. The FAU Center for Economic Education provides workshops to the districts – the vast majority of which are provided at no charge (the only exception has been when a district has received a grant that has included workshops provided by the Center). The topics of the workshops range in grade level from the elementary school level "Chocolate Economics" to the high school level "Election Economics." Since economics is not a formal course except in the 12th grade, many of the Center's workshops focus on how to teach economics in other subjects such as U.S. history or civics or mathematics. These workshops are important since the Florida Sunshine State Standards specify that economics be taught at all grade levels.

Currently, the FAU Center uses two regular master teachers from local area schools – Spanish River High and Seminole Ridge High – to help with workshops. In addition, other economics faculty members have been involved with the Center. Professor Rhodd is the associate director of the Center and has participated in delivering workshops and has helped the Florida Council for Economic Education as a judge for its ethics program final projects. Professor Chiang has worked with the FAU Center to allow local area teachers to attend talks by noted economists such as Paul Krugman.

The FAU Center won the 2010 Albert Beekhuis Award for outstanding performance in working with teachers and exhibiting excellence in practice. The award is given annually by the Council for Economic Education (CEE), the national organization with which the Center is affiliated.

Table 1 shows a summary of the number of workshops, attendees, and total length of workshops.

Table 1:

Year	Workshops	Teachers	Total Hours
YR12/13		262	49
YR11/12	16	301	68
YR10/11	11	257	48
YR09/10	14	227	95
YR08/09	10	172	35
YR07/08	11	213	36
YR06/07	8	166	27
YR05/06	11	185	35
Totals	96	1806	396

Teaching Materials

The FAU Center for Economic Education personnel have participated in the development of a number of economic education materials. These include:

- *National Standards for Financial Literacy*, Council for Economic Education, 2013, William Bosshardt, project director.
- Focus: Middle School World History, Council for Economic Education, 2011, William Bosshardt, project director.
- *Financial Freedom*, Florida Council on Economic Education, 2011, Brett Burkey, project director, Andrea Caceres-Santamaria, writer.
- *Focus: Globalization*, an on-line video workshop, Council for Economic Education, 2010, William Bosshardt, co-developer.
- Teaching Financial Crisis, Council for Economic Education, 2010, Brett Burkey, writer
- Focus: Understanding Economics in Civics and Government, Council for Economic Education, 2009, William Bosshardt, writer.
- Focus: Globalization, National Council on Economic Education, 2006. Translated into Ukrainian by Ukrainian Council on Economic Education, 2007, William Bosshardt, writer.

These publications are used nationally to help teachers teach economics in their classes. In addition, *Financial Freedom* is used in some Florida correctional facilities. *Focus: Globalization* was translated into Ukrainian and used in workshops throughout Ukraine.

National Standards for Financial Literacy is a set of standards that detail what content should be taught about financial literacy throughout the grade levels. These standards should have influence on the national level in terms of what is taught about personal finance and how it should be taught.

In addition to teaching materials, other publications contribute to the dialogue on economic education.

- "Business in the Middle Ages: What Was the Role of Guilds?" William Bosshardt, with Jane Lopus, Social Education 77(2), 2013, 66-69.
- "Teacher Workshops Chip Away at Economic Illiteracy" William Bosshardt with Paul Grimes and Mary Suiter, The Regional Economist, January 2011, pp. 15-17.
- "Standards for Teaching about the Federal Reserve System: An Initiative by Two Federal Reserve Banks" William Bosshardt with Paul Grimes and Mary Suiter, <u>Social Education</u>, vol 75(2), March/April, 2011, pg. 82-86.

Research

The FAU Center for Economic Education personnel also conducts research in the area of economic education. While research is not the primary focus of the FAU Center, the research done by the Center contributes to the Center's prominence and contributes to the research mission of the department, college, and university. Since 2005, FAU Center personnel have published eight refereed publications and two non-refereed publications

which can be found on the abbreviated CVS of Professors Bosshardt and Rhodd in Appendix 4.

F. Other Program Goals for School or College

• □ Describe and assess how well goals are being met

The goals discussed above can be summarized as 1) providing a broad-based, high-quality education experience in economics both at the undergraduate and graduate levels, 2) to contribute to the understanding of economic, political and social affairs through increasing the quantity of high-level research and 3) to contribute to the economic, political and social development of the local area/region. At present, there is work to be done in each of these areas. Perhaps most important is the increased emphasis we should be placing on the 3rd of these items. However, it should be recognized that this is a three-legged stool. That is, traditional academic research often leads to spillovers into research targeting local needs. Similarly, through the provision of the best possible educational opportunities for our students we will again be contributing to local development. Thus, as an "Other" goal, we simply need to do more of what we have been doing and do it better.

G. Strengths and opportunities that support achievement of program goals for School or Program.

• List and describe

The Department has a number of strengths that put in a favorable position for increased development. These include:

- 1. An outstanding group of relatively young faculty hired in the past decade as evidenced by their abbreviated CVs found in Appendix 4.
- 2. At the undergraduate level, our program is open access.
- 3. Very well-developed programs at both the undergraduate and graduate levels. With over 700 undergraduates and about 65 graduates our faculty are able to teach a broad array of courses that both train the community and business leaders of the area for years to come but also provide the faculty with the opportunity to teach what they concentrate their research on providing obvious synergies.
- 4. The department has an admittedly imperfect but rather consistent set of policies (teaching loads, annual evaluations, merit allocation, tenure and promotion and the like) that create an incentive structure that is consistent and encourages quality over quantity in all that is done.
- 5. The department has made great strides, as mentioned in the

Faculty section above, in the area of high-quality research rising nearly 100 slots in the most recent ranking of departments. This is not simply a strength for the faculty involved but for the entire department as young applicants for faculty positions, as well as potential graduate students, with promising futures are attracted to success.

6. Commitment to alternative means for students to pursue economic education such as our extensive use of LCVS technology and the use of state of the art software/labs and the hands on experience these provide to students.

H. Weaknesses and threats that impede program progress for School or College

- List and describe
 - 1. The greatest weakness/threat we have is appropriate and consistent funding. Given recent budget problems, while our undergraduate program was growing from roughly 250 to over 700 majors over the past few years, the number of tenure-earning faculty was actually falling. The gap being made up by the addition of three very capable full-time instructors. While this trade-off of tenure-earning faculty for instructors has greatly helped the budget, were it continue, we would definitely see a fall-off in research output and engagement with the local community as instructors have no service or research assignments. Further, a continuation of this trend would no doubt lead some of our most productive faculty to seek greener pastures. We do not need any more Instructors. We do however need some growth in the tenure-earning side of the department as the demands of our growing program puts added pressure on the existing tenure-earning faculty.
 - 2. The large contingent of instructors and adjuncts we use necessarily leads to a considerable variance in course content, delivery and rigor. This can lead to "Professor Shopping".
 - 3. The lack of senior tenure-earning faculty. For a number of years now there has been but one person holding the rank of Professor, who has also been the Chair. We have developed a fine stock of young talent but for them to fully achieve they need the direction and guidance of senior faculty members with strong, active research agendas and experience with journal editorial practices.
 - 4. As is no doubt true across departments at FAU, we have both extreme diversity in the ethnicity and education preparedness of our undergraduates. The first of these is, no doubt, a strength. The latter, however makes it very difficult to

push the better students to their potential as a good bit of time must be spent on remedial instruction.

- 5. We have yet to fully integrate either our undergraduates or graduate students for that matter in our own research. This would serve students and faculty alike and make our students more attractive to potential employers or admissions officers at universities for further study.
- 6. Given that our undergraduate programs require a 2.0 G.P.A. for admission while the other programs in business (other than Sports Management) require a 2.5, we have a great many majors who want to major in one of the traditional majors such as marketing or finance but, if they lack the 2.5 G.P.A yet still want to be in the College of Business, major in economics.

I. Resource analysis for School or College

• Sufficiency of resources to meet program goals

This was treated above as the greatest weakness of our program. With the growth in our program as described throughout this review, we have actually witnessed a decline in tenure-earning faculty lines in favor of "teaching-only" instructors. Further, while the department is reasonably competitive at the time of hiring, the lack of pay raise money and increasing teaching loads to cover shortfalls show a University/College/Department positioned poorly to become truly outstanding. Should productive faculty members continue to fall behind the market, exodus from FAU will continue, remaining faculty will be over-taxed with student demands and the enormous progress the department has made in the profession over the past decade will go away equally quickly. Now that the state has allowed what were community colleges to become bachelor degree granting institutions, a wedge will be increasingly drawn between those schools that can truly claim excellence and those who cannot. At present, we, and the entire university are in real danger of falling into the latter category.

J. Future Direction for School or College

•	Anticipated	changes
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- 3 to 5 broad questions for the review team to answer with respect to a unit's current state and aspirations
- 1. The last few years have proven that making a list of anticipated changes can be a futile exercise. Consider that in the past 3 years we have a new Dean, new Provost

and new President and, of course, each brings with them new ideas and goals. Perhaps the best that can be said is that we would *desire* to see some or all of the following changes:

- a. Increased and more stable funding.
- b. Reduced reliance on adjuncts and instructors.
- c. Greater funding independence from the state—that is, increased external funding.
- d. Greater continuity across departments in the College of Business with respect to the evaluation and treatment of research.
- e. More equity in teaching loads across the College—where equity translates into the most productive scholars in the College, regardless of department, having reduced loads.
- f. Greater transparency in the tenure and promotion process after a case leaves the department.

2. Questions for the review team:

- a. Would the department be better off increasing the G.P.A requirement to the College minimum of 2.5 in our undergraduate degrees given that our enormous growth has not resulted in additional tenure-earning positions which threatens our continued progress in the research area?
- b. Has the department struck a good balance between its instructional and research goals?
- c. Would the department (and students) be better served if we moved all of our ECO 2013, ECO 2023, and ECO 4223 to LCVS or should we maintain a traditional option for students who desire it?
- d. At what point, if any, should the department pursue offering the Ph.D.?
- e. Given our open access status in the undergraduate programs a rather large share of our majors are likely in economics because they lack the 2.5 G.P.A. for admission to other majors in the College of Business, should we recast some of our course offerings to appeal more directly to these business-oriented students?

K. If available, student feedback regarding programs.

We have no formal student feedback process relative to our programs. However, if enrollment growth as we have witnessed suggests we are passing the market test, if such feedback were available it would likely be quite positive. This may seem like a dodge but really isn't. Otherwise, why would each of our programs be growing so rapidly?

Appendix 1: Academic Learning Compact

CONTENT KNOWLEDGE (Declarative Knowledge): Students in Economics will demonstrate an understanding of concepts, theories and facts about the behavior of consumers and firms, the role of prices in resource allocation and the impact of the behavior of consumers, firms and governments on the level of income, employment and inflation in the economy.

All economics students will complete examinations in several required courses that will assess their mastery of the content of the discipline: ECO 3101 (Intermediate Microeconomics), ECO 3203 (Intermediate Macroeconomics) and one of the three international economics courses (ECS 3013: International Economic Development; ECO 4704: Economics of International Trade; or ECO 4713: International Monetary Economics). ECO 3101 and 3203 will cover the broad content of the economics discipline and the

CONTENT KNOWLEDGE (Technical Skills): Students in Economics will demonstrate an understanding of statistical techniques applied to economic theories and data using an econometrics computer package.

international course will expand the student's understanding of the international economy.

In ECO 4421 (Introduction to Econometric Methods), students will complete a written research project that requires the application of an econometric technique to economic data using an econometrics computer package. This course will assess the students' technical skills by means of examinations and the research project completed by the student.

COMMUNICATION SKILLS (Written Communication; Oral Communication): Students in Economics will write about concepts and theories in economics in a grammatically correct and logically consistent manner. Students will make a

classroom presentation about an economic issue that is clear, comprehensive, and demonstrates knowledge of the relevant economic concepts and theories.

CRITICAL THINKING SKILLS (Analytical Skills): Students in Economics will demonstrate an ability to identify economic problems and issues, review relevant economic theories and analyses, and formulate and support their own conclusions.

In ECO 4933 (Senior Seminar in Economics), students will complete one or more research papers and classroom presentations in which they will identify an economic problem or issue, review relevant economics literature, and contain the student's own conclusions and the basis for those conclusions.

COMMUNICATION SKILLS (Graphical Communication): Students in Economics will apply graphical analysis to explain market prices, consumer and firm behavior, national income, employment and inflation.

Students will be assessed on their graphical skills via papers and assignments in ECO 3101, ECO 3203, and one of the three international economics courses (ECS 3013, ECO 4704, or ECO 4713). Students will also be assessed on their proficiency in graphical analysis via the research papers submitted in ECO 4933.

Appendix 2: Economics Program Sheet

There are two major programs within the economics department. The first, Business Economics, integrates business and economics courses in a way that allows students to analyze business problems with the insight garnered from the economics discipline. The General Economics program places emphasis on social science within a broad liberal arts education.

Required Courses (Business Economics)

A minimum 120 credit hours are required for the degree. Other administrative requirements will be needed; see the University Catalog for detailed requirements.

Intellectual Foundation Program (IFP)*

English I	ENC 1101	
English II	ENC 1102	(Pre: ENC 1101)
Society and Human Behavior	6 credits	(3 credits met by ECO requirement)
Natural Science	6 credits	(one course must include a lab)
Math & Quantitative Reasoning	6 credits	(met with MAC2233 and STA2023)
Global Citizenship	6 credits	(mot with 1/11102233 and 511120237
Creative Expression	6 credits	

^{*}Students with an AA (Associate of Arts) degree from a regionally accredited Florida Public Institution are deemed to have fulfilled the IFP.

Pre-Business Foundation Courses (Minimum grade of "C")

Accounting I (Financial) ACG 2021 (Pre: 30 credits)

Accounting II (Managerial) ACG 2071 (Pre: ACG 2021 with a grade of "C" or

ECO 2013 (Pre: 30 credits) Macroeconomics Microeconomics ECO 2023 (Pre: 30 credits)

MAC 2233 (Pre: College algebra or see math dept.) Methods of Calculus STA 2023 (Pre: Liberal arts math 1 or see math **Introductory Statistics**

dept.)

Information Systems Fundamentals ISM 2000

Business Core (Pre: 60 credits. Minimum grade of "C") Mgmt & Organizational Behavior MAN 3025

Marketing Management MAR 3023 (Pre: ECO 2013 &

ECO 2023)

Financial Management FIN 3403 (Pre: ACG 2021 &

2071) Business Law I **BUL 4421**

Communicating Business Information GEB 3213 (Pre: 60hrs)

or Writing for Management or ENC 3213 (Pre: ENC 1101 & ISM 3011 (Pre: ISM 2000) 1102) Management Information Systems Quantitative Methods in Admin QMB 3600 (Pre: MAC 2233 &

STA 2023)

Operations Management MAN 3506 (Pre: MAN3025; & QMB 3600 with "C"

or better)

Global Strategy and Policy

MAN 4720 (Pre: 90 credits; and MAN 3025, MAR 3023, FIN3403, & QMB 3600. Corequisite: MAN 3506)

Business Electives

The business economics major requires a minimum of 51 credits of upper-division (#3000 +) college of business courses (Excluding ENC3213). Most business economics majors will need 6 additional credits (2 courses) of upper-division business courses beyond the Business Core and the Business Economics Major courses to fulfill this requirement.

Business Economics Major Courses(Pre: 60 credits. Minimum grade of "C")Intermediate MicroeconomicsECO 3101 (Pre: ECO 2013 & 2023)or Managerial Economicsor ECP 3703 (Pre: ECO 2013 & 2023)Intermediate MacroeconomicsECO 3203 (Pre: ECO 2013 & 2023)Introduction to Econometric MethodsECO 4421 (Pre: STA 2023; & ECO 2013

& 2023)

3 credits of Int'l. Economic course ECS 3013, ECO 4704, or ECO 4713 (Pre: ECO 2013

& 2023)

6 additional credits of upper-division economic (Not ECO 3003)

Cases in Economic Analysis ECO 4933 (Pre: ECO 3101 or ECP 3703; & ECO

3203)

Required Courses (General Economics)

A minimum 120 credit hours are required for the degree. Other administrative requirements will be needed; see the University Catalog for detailed requirements.

Intellectual Foundation Program (IFP)*

English I
English II
English II
ENC 1102
(Pre: ENC 1101)
Society and Human Behavior
Natural Science
Math & Quantitative Reasoning
Global Citizenship

ENC 1101
(Pre: ENC 1101)
(ore course must include a met with MAC2233 and foredits)
(met with MAC2233 and foredits)

6 credits

Pre-Business Foundation Courses (Minimum grade of "C")

Accounting I (Financial) ACG 2021 (Pre: 30 credits)

Accounting II (Managerial) ACG 2071 (Pre: ACG 2021 with a grade of "C" or

better)

Creative Expression

Macroeconomics ECO 2013 (Pre: 30 credits)
Microeconomics ECO 2023 (Pre: 30 credits)

Methods of Calculus MAC 2233 (Pre: College algebra or see math dept.) Introductory Statistics STA 2023 (Pre: Liberal arts math 1 or see math

General Economics Major (Pre: 60 credits. Minimum grade of "C")
Intermediate Microeconomics ECO 3101 (Pre: ECO 2013 & 2023) Intermediate Macroeconomics ECO 3203 (Pre: ECO 2013 &

2023)

Intro. to Econometric Methods ECO 4421 (Pre: STA 2023; & ECO 2013 & 2023) 3 credits of Int'l. Economics Course ECS 3013, ECO 4704, or ECO 4713 (Pre: ECO 2013

^{*}Students with an AA (Associate of Arts) degree from a regionally accredited Florida Public Institution are deemed to have met the IFP. (http://www.fau.edu/freshmanadvising/IFP audit.php)

12 additional credits of Cases in Economic Analysis 3203) upper-division economics (Not ECO 3003) ECO 4933 (Pre: ECO 3101 or ECP 3703, & ECO

Other Required Courses

12 credits of social science cognates** (Pre: See catalog under "General Economics Major")

Foreign Language Proficiency: by college level course work through the 2nd semester or higher of a foreign language **or** equivalent native competency (See catalog's "foreign language graduation" requirement).

**Note - 45 credits of upper-division courses are required for the degree. Students may wish to take all or some of their social science cognate courses as upper-division courses (3000+) to assist in fulfilling this graduation requirement.

Appendix 3: Department Teaching Load Policy

Teaching Load Policy

Department of Economics

Last Updated (1.15.12)

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2/2 Load: Publication of three Tier 2 equivalents in prior 4 years.

3/2 Load: Publication of two Tier 2 equivalents in prior 4 years.

3/3 Load: Publication one Tier 2 equivalents in prior 4 years.

4/3 Load: Publication of three EconLit referenced, refereed papers in prior 4 years.

4/4 Load: Failure to satisfy the requirements of a 4/3 load.

Notes:

- 1. One Tier 1 level publication is equivalent to two Tier 2 level publications
- 2. The policy does not apply to Assistants, in their first 3 years.
- 3. All tradeoffs embodied in the Provost's memo apply.

Appendix 4: Abbreviated Faculty CVs

KUNTAL BANERJEE

Education

Ph.D., Cornell University, 2007 (Economics)

FAU Experience

Assistant Professor at Department of Economics August 2007-till date.

Primary Teaching Interests/Teaching Load

Principles of Economics, Mathematical Economics and Advanced Mathematical Economics: Load 3/2

Primary Research Interests

Microeconomic Theory, Dynamic Models of Resource Allocation and Intergenerational Equity.

Recent Publications

'Impatience Implications of Weakly Paretian Orders: Existence and Genericity," (with Ram Sewak Dubey) <u>Journal of Mathematical Economics</u>, Vol 49 (2013) 134-140.

"Generalized Time-Invariant Overtaking," (with Geir Asheimand Claude d.Aspremont) <u>Journal of</u> Mathematical Economics, Vol. 46 (2010), 519-533.

"Equivalence of Utilitarian and Weakly Maximal Programs," (with Tapan Mitra) lead article <u>Journal of Mathematical Economics</u>, Vol. 46 (2010) 279-292.

"Fixed-Step Anonymous Overtaking and Catching-Up," (with Geir Asheim) International Journal of Economic Theory, Vol 6 (2010), 149-165.

"On the Continuity of Ethical Socia IWelfare Orders for In.nite Utility Streams," (with Tapan Mitra) lead article <u>Social Choice and Welfare</u>, Vol. 30 (2008), 1-12.

"On the Impatience Implications of Paretian Social Welfare Functions," (with Tapan Mitra) <u>Journal of Mathematical Economics</u>, Vol. 43 (2007), 236-248.

"On the Extension of Utilitarian and Suppes-Sen Social Welfare Relations to In.nite Utility Streams," Social Choice and Welfare, Vol. 27 (2006), 327-339.

"On the Equity-Efficiency Trade Off in Aggregating In.nite Utility Streams," <u>Economics Letters</u>, Vol. 93 (2006), 63-67.

WILLIAM D. BOSSHARDT JR.

Education

Ph.D., Purdue University, 1991 (Economics)

FAU Experience

Director of the FAU Center for Economic Education, August 1995 to present. Associate Professor, August 1999 to present. Assistant Professor, August 1995 to August 1999.

Primary Teaching Interests/Teaching Load

Principles of Economics, Environmental, Intermediate Micro: 2/2 (one course for Center)

Primary Research Interests

Economic Education

Recent Publications

"Development of the National Standards for Financial Literacy," with William Walstad, <u>Journal of Economic Education</u>, forthcoming, 2014.

"Course Requirements for Bachelors Degrees in Economics" with Michael Watts and William E. Becker, <u>American Economic Review</u>: <u>Papers and Proceedings</u>, 103(3), 2013, 643-647.

"How Departments of Economics Evaluate Teaching," with William E. Becker and Michael Watts, <u>Journal of Economic Education</u>, vol. 43 no. 3, July-September, 2012, 324-33.

"Is Economics Coursework, or Majoring in Economics, Associated with Different Civic Behaviors?" with Sam Allgood, Wilbert van der Klaauw, and Michael Watts, <u>Journal of Economic Education</u>, vol. 43 no. 3, July-September, 2012, 248-68.

"Does Calculus Help in Principles of Economics Courses? Estimates Using Matching Estimators," with Neela Manage, <u>American Economist</u>, 2011, vol. LVI (1), 29-37.

"Economics Coursework and Long-Term Behavior and Experiences of College Graduates in Labor Markets and Personal Finance" with Michael Watts, Sam Allgood and Wilbert van der Klaauw, Economic Inquiry, Vol. 49, No. 3, July 2011, 771–794.

ERIC P. CHIANG

Graduate Director

Education

Ph.D., University of Florida, 2002 (Economics)

FAU Experience

June 2013 – July 2008: Assistant Professor, Department of Economics

July 2012 – present: Director of Instructional Technology, College of Business

August 2008 – present: Associate Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Microeconomic Principles: 3/3

Primary Research Interests

Economic Education; International Development; Network Competition

Recent Publications

"The Impact of Non-Neutral Federal Regulatory Policy on Competition"; with Janice A. Hauge, *Telecommunications Policy*, forthcoming.

"Trade, Structural Reform, and Institutions in Sub-Saharan Africa"; with Djeto Assane, *Contemporary Economic Policy*, forthcoming.

"The Influence of Remittances on Education and Health Outcomes: A Cross-Country Study"; with Maria Zhunio and Sharmila Vishwasrao, *Applied Economics*, Vol. 44, Dec. 2012, pp. 4605-4615.

"Estimating the Willingness to Pay for Digital Music"; with Djeto Assane, *Contemporary Economic Policy*, Vol. 27, Oct. 2009, pp. 512-522.

"Whose Call Is It? Targeting Universal Service Programs to Low-Income Households' Telecommunications Preferences"; with Janice Hauge and Mark Jamison, *Telecommunications Policy*, Vol. 33, Apr.-May 2009, pp. 129-145.

"Asymmetric Information, Bargaining, and Comparative Advantage in Trade Relationships: An Interactive Game"; *Southern Economic Journal*, Vol. 74, Oct. 2007, pp. 601-608.

ERIC J LEVY

Education

University of Florida - First year PhD coursework August 2005-May 2006 MS Economics FAU 2003

FAU Experience

August 2009 - present: Visiting Instructor

August 2003-August 2005: Adjunct Instructor, Department of Economics

Primary Teaching Interests/Teaching Load

Principles of Microeconomics; Principles of Macroeconomics; Money and Banking: 4/4

Teaching Awards

2011 College of Business excellence in undergraduate teaching.

2011 University wide excellence in undergraduate teaching award.

Primary Research Interests

Macroeconomics; Political Economics

Recent Publications

Money and Banking a Macroeconomic Perspective; Kendall Hunt Publisher, August 2013.

ANTHONY P. ELLISON

Education

M.Phil. Bath University, 2000 (Economics)

FAU Experience

August 2009-present: Visiting Instructor August 2005-August 2009 Adjunct

Primary Teaching Interests

Economics of the Public Sector Economics of International Trade Money & Banking International Monetary Economics International Economic Development

Primary Research Interests

Economics of Public Policy, Economic History

Recent Publications

Money, Markets and Methods, Kendall Hunt, 2010; second edition 2012

Entrepreneurs and the Transformation of the Global Economy, 2002, Edward Elgar Publishing.

MONICA P. ESCALERAS

Education

Ph.D., Florida International University, 2003 (Economics)

FAU Experience

Aug 2010-Present: **Associate Professor**, Department of Economics Aug 2006-July 2010: **Assistant Professor**, Department of Economics

Aug 2004-June 2006: Visiting Assistant Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Intermediate Macroeconomics: 2/2

Primary Research Interests

Natural Hazards, Economics of Public Policy

Recent Publications

"A Holistic Approach to the Determinants of Private Investment," <u>Journal of Developing Areas</u>, with Constantina Kottaridi, forthcoming.

"Corruption and Voter Participation: Evidence from the US States," <u>Public Finance Review</u>, 40, (November 2012), with Peter Calcagno and William Shughart III.

"Fiscal Decentralization and Natural Hazard Risks," <u>Public Choice</u>, 151, (April, 2012), with Charles Register.

"Natural Disasters and Foreign Direct Investment," <u>Land Economics</u>, 87, (May, 2011), with Charles Register.

"Freedom of Information Acts and Public Sector Corruption," <u>Public Choice</u>, 145, (December, 2010), with Monica Register and Shu Lin.

"The Ill Effects of Public Sector Corruption in the Water and Sanitation Sector," <u>Land Economics</u>, 85, (May, 2009), with Charles Register and Nejat Anbarci.

"Traffic Fatalities: Does Income Inequality Create an Externality?" <u>Canadian Journal of Economics</u>, 42, (February, 2009), with Nejat Anbarci and Charles Register.

"Mitigating Natural Disasters through Collective Action: The Effectiveness of Tsunami Early Warning Systems," <u>Southern Economic Journal</u>, 74, (April, 2008), with Charles Register.

SUMAN GHOSH

Education

Ph.D in Economics, Cornell University, 2002.

FAU Experience

August 2009 to Present: Associate Professor, Department of Economics August 2003-2009: Assistant Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Principles of Economics: 2/2

Primary Research Interests

Labor Economics, Development Economics and Public Economics

Recent Publications

"Can A Rise in Your Wage Make You Worse Off? A Public Goods Perspective," joint with Alexander Karaivanov, <u>Journal of Development Economics</u>, *Volume 84, Issue 1, September 2007*.

"A Case for Bundling Public Goods Contributions," joint with Alexander Karaivanov and Mandar P. Oak, Journal of Public Economic Theory, *Volume 9, Issue 3, June 2007*.

"Male Wages and Female Welfare: Public Goods, Private Markets, and Intrahousehold Inequality," joint with Ravi Kanbur, Cornell University, Oxford Economic Papers, Volume 60, Issue 1, January 2008.

"Standard Promotion Practices versus Up-or-out Contracts," joint with Michael Waldman,. <u>Rand Journal of Economics</u>, *Volume 41*, *Summer 2010*.

"Microfinance and Competition for External Funding," joint with Eric Van Tassel <u>Economics</u> <u>Letters</u>, *Volume 102 (2), August 2011*.

"Funding Microfinance Under Asymmetric Information," joint with Eric Van Tassel <u>Journal of Development Economics</u>, *Volume 101, March 2013*.

"Product Market Competition and Upstream Innovation: Evidence from the US Electricity Market Deregulation," joint with Paroma Sanyal, Brandeis University, <u>Review of Economics and Statistics</u>, Issue 1, March 2013.

Favorable Selection in the Labor Market: A Theory of Worker Mobility in R&D Intensive Industries," joint with Kameshwari Shankar, CUNY, forthcoming, <u>Journal of Human Capital</u>.

NEELA D. MANAGE

Education

Ph.D., George Washington University, 1981 (Economics)

FAU Experience

7/1996-Present: Associate Professor of Economics, College of Business

6/1994-8/1995: Acting Co-Chair, Department of Economics

8/1993-1/1996: Associate Dean, College of Social Science

8/1992-6/1996: Program Director, Social Statistics Program, College of Social Science

8/1992-6/1996: Director, Statistics Computer Laboratory, College of Social Science

8/1989-6/1996: Associate Professor of Economics, College of Social Science

8/1981-8/1989: Assistant Professor (tenured in 1986), College of Social Science

Primary Teaching Interests/Teaching Load

Graduate: Monetary Economics, International Monetary Economics, Master's Thesis (Chaired 18, Member 39)

Undergraduate: Econometrics, Macroeconomics, Money & Banking (teaching load 3/4)

Primary Research Interests

Macroeconomics, Monetary Economics, Financial Regulation, and Applied Econometrics

Select Publications

"Does Calculus Help in Principles of Economics Courses? Estimates Using Matching Estimators," The American Economist, Spring 2011, joint with W. Bosshardt.

"Codependent Cycles in Macroeconomic Time Series," <u>American Statistical Association</u> <u>Proceedings</u>, Business and Economic Statistics Section 1999.

"Ricardian Equivalence, Budget Deficits, and Savings in the United States: 1955:11991:4," Applied Economics Letters, 1996, (joint with C.S. Hung and R. Cebula).

"Deficits and Interest Rates: An Analysis Examining Some Neglected Variables," <u>International Review of Economics and Finance</u>, 1993, joint with C.S.Hung and R. Cebula.

"Interest Rate Ceilings and the Role of Security and Collection Remedies in Loan Contracts," Economic Inquiry, 1990.

"Expenditures and Receipts: Testing for Causality in State and Local Government Finances," <u>Public Choice</u>, 1987, joint with M. Marlow.

"The Causal Relation between Federal Expenditures and Receipts," <u>Southern Economic Journal</u>, 1986, joint with M. Marlow.

CHARLES A. REGISTER

Chair

Education

Ph.D., Oklahoma State University, 1984 (Economics)

FAU Experience

March 2009- present: Chair, Department of Economics

July 1997 through June 2007: Chair, Department of Economics

July 1997-present: Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Principles of Economics: 1/1

Primary Research Interests

Natural Hazards, Economics of Public Policy

Recent Publications

"Fiscal Decentralization and Natural Hazard Risks," <u>Public Choice</u>, 151, (April, 2012), with Monica Escaleras.

"Natural Disasters and Foreign Direct Investment," <u>Land Economics</u>, 87, (May, 2011), with Monica Escaleras.

"Freedom of Information Acts and Public Sector Corruption," <u>Public Choice</u>, 145, (December, 2010), with Monica Escaleras and Shu Lin.

"The Ill Effects of Public Sector Corruption in the Water and Sanitation Sector," <u>Land Economics</u>, 85, (May, 2009), with Monica Escaleras and Nejat Anbarci.

"Traffic Fatalities: Does Income Inequality Create an Externality?" <u>Canadian Journal of</u> Economics, 42, (February, 2009), with Nejat Anbarci and Monica Escaleras.

"Mitigating Natural Disasters through Collective Action: The Effectiveness of Tsunami Early Warning Systems," <u>Southern Economic Journal</u>, 74, (April, 2008), with Monica Escaleras.

"Earthquake Fatalities: The Interaction of Nature and Political Economy," <u>Journal of Public Economics</u>, 89, (September, 2005), with Nejat Anbarci and Monica Escaleras.

RUPERT RHODD

Associate Dean

Education

Ph.D., Fordham University, 1990 (Economics)

FAU Experience

July 2011 to present - Associate Dean; College of Business

August 1996 to present - Associate Professor, Economics Department

January 1995 to July 1996 - Associate Dean; College of Liberal Arts

January 1992 to December 1994, Chair; Division of Social Sciences, College of Liberal Arts

August 1990 to July 1996 - Assistant Professor; College of Liberal Arts

August 1989 to July 1990 - Assistant Professor; Economics Department, College of Social

Science

Primary Teaching Interests/Teaching Load

Cases in Economic Analysis: 1/1

Primary Research Interests

Economic Development, Economic Education, Regional Economics

Recent Publications

- "Academic Performance and Non-Intellectual Variables: Is Age a Factor in Selecting a Major?" <u>International Journal of Education & Research</u>, with Sandra Schrouder (June 2013)
- "A Measure of Acculturation for Afro-Caribbean Youth," <u>ABNF Journal</u>, with Cynthia Archibald, (Winter/Spring, 2012).
- "The Informal Economy in Jamaica: Is It Feasible to Tax this Sector?" <u>Journal of International Business and Cultural Studies</u>, with Chantal Wedderburn and Eric Chiang, Vol. 6, (2011), 1-13.
- "Will Welfare in Sub-Saharan African Countries Increase After Debt Cancellation?" <u>Asian-African Journal of Economics and Econometrics</u>, with Gerald Scott, Vol. 11, No. 1, (2011):43-54.
- "Weekend Business School Degrees: Leveling the Playing Field?" <u>Applied Economics Letters</u>, with Sandra Schrouder, and Marcus Allen, (September 2011): 1289-1294.
- "Does the Performance on Principles of Economics Courses Affect the Overall Academic Success of Undergraduate Business Majors?" <u>International Review of Economics Education</u>, with Sandra Schrouder and Marcus Allen, Volume 8, #1, (2009): 48-63.

TING LEVY

Education

Ph.D., University of Florida, 2010 (Economics)

FAU Experience

January 2011 – Present: Instructor, Department of Economics May 2010 – December 2010: Adjunct Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Principles of Microeconomics, Principles of Macroeconomics, Economic Principles and Policies, Intermediate Microeconomics, Intermediate Macroeconomics, Money and Banking, Managerial Economics, International Economic Development, Mathematical Economics, Economics of International Trade, International Monetary Economics, Advanced International Trade

4/4

Primary Research Interests

International Economics, Environmental Economics, Economic Growth, Economic Development, Political Economics.

Recent Publications

"Asset Pricing with Relative Performance and Heterogeneous Agents," with Xiangbo Liu, Zijun Liu and Zhigang Qiu, <u>Theoretical Economics Letters</u>, 2012, 2, 520-523)

"Intra-Industry Trade and the Demand for Child Labor," with Kristian Estevez, <u>International</u> Journal of Economic Theory, Forthcoming)

"Interactive Voice Recognition Communication in Electoral Politics: Exploratory Meta-Data Analysis," with Spencer Kimball, Henry Venturelli and Sophie Miller, <u>American Behavioral Scientist</u>, Forthcoming.

ERIC VAN TASSEL

Education

Ph.D., University of California, Riverside, 1998 (Economics)

FAU Experience

2007 – present: Associate Professor

2007 – 2009: Chair, Department of Economics

2002 – 2007: Assistant Professor

Primary Teaching Interests/Teaching Load

Microeconomics and Money & Banking: 2/3

Primary Research Interests

Microfinance, Credit Markets

Recent Publications

"Funding Microfinance under Asymmetric Information," joint with Suman Ghosh, <u>Journal of</u> Development Economics, 101, 2013.

"Microfinance and competition for external funds," joint with Suman Ghosh, <u>Economics Letters</u>, 112, 2011.

"Information disclosure in credit markets when banks' costs are endogenous," <u>Journal of Banking and Finance</u>, 35(2), 2011

"Recent trends in microfinance: some theoretical implications," with S Ghosh (2008) <u>New and Enduring Themes in Development Economics</u>, edited by Bhaskar Dutta, Tridip Ray and E Somanathan, World Scientific Publications.

"Asymmetric information and mode of entry in foreign credit markets," joint with Sharmila Vishwasrao, Journal of Banking and Finance, 31(12), 2007.

"Relationship Lending Under Asymmetric Information: A Case of Blocked Entry," <u>International</u> <u>Journal of Industrial Organization</u>, 24(5), 2006

SHARMILA VISHWASRAO

EDUCATION

Ph.D.(Economics), Purdue University, 1991.

FAU EXPERIENCE

Associate Professor: 2002 to present. Assistant Professor: 1996-2002

Principle Teaching Interests/ Teaching Load

International Development Economics, graduate and undergraduate. Principles of Microeconomics. 3/2 or 2/2

RECENT PUBLICATIONS

"Income diversification and risk: Does ownership matter? An empirical examination of Indian banks," with Anita K. Pennathur and Vijaya Subrahmanyam, <u>Journal of Banking & Finance</u>, Volume 36, Issue 8, August 2012, pages 2203-2215.

"The Impact of Remittances on Education and Health: A Cross-Country Study," with Maria Cristina Zhunio and Eric P. Chiang, <u>Applied Economics</u>, 2012, 44, pages 4605-4616.

"Physician Quality and Health Care for the Poor and Uninsured," with Lara Gardner, <u>Inquiry</u>, Vol. 47(1) Spring 2010, pages 62-80.

"On Welfare Reducing Technological Change in a North-South Framework," with Hassan Benchekroun, Oxford Economic Papers, Oxford University Press, vol. 61(3), July 2009, pages 603-622.

"Asymmetric Information and the Mode of Entry in Foreign Credit Markets," with Eric Van Tassel, <u>Journal of Banking and Finance</u>, Vol. 31, December 2007, pages 3742–3760.

"Royalties vs. Fees: How do Firms Pay for Foreign Technology?" <u>International Journal of</u> Industrial Organization, Vol. 25, August 2007, pages 741-759.

"Optimum tariffs and patent length in a model of North-South technology transfer," with Srabana Gupta and Hassan Benchekroun, <u>International Review of Economics and Finance</u>, Volume 60, No. 1, January 2007, pages 1-14.

KY H. YUHN

Education

Ph.D. in Economics, Northern Illinois University, 1985 ABD in Finance, The Wharton School, University of Pennsylvania, 1988 - 1991

FAU Experience

August 1993 - Present: Associate Professor, Department of Economics August 1997 - August 2006: Director of the Graduate Program, Department of Economics January 2001 - December 2004: InternetCoast Adams of Professor, College of Business

Primary Teaching Interests/Teaching Load

Courses Taught since 2010: Macroeconomic Principles; Intermediate Macroeconomics; Money & Banking; International Monetary Economics; Advanced Macroeconomics; Advanced Econometrics; Topics in Econometrics (seven courses)

Teaching Load: 3/4

Primary Research Interests

Asset pricing and market volatility; Economic growth and technological change

Recent Publications

"Has the Korean *Chaebol* Model Succeeded?" with Seung Park, <u>Journal of Economic Studies</u>, 39, 2012.

"Information Technology, Organizational Transformation, and Productivity Growth: An Examination of the Brynjolfsson-Hitt Proposition," with Seung Park, <u>Asian Economic Journal</u>, 24, 2010.

"What Happens to Pacific-Basin Emerging Markets after the 1997 Financial Crisis?" <u>Applied</u> Financial Economics, 18, 2008.

"The Spatial Density of Production Activity and Production Differentials across Regimes," (with Young Lee), Journal of the Korean Economy, 2008.

"Endogenous Growth and Agglomeration Economies in Korean Manufacturing: A Sign of Declining Competitiveness?" with Young Lee and D.S. Lee, <u>Journal of the Korean Economy</u>, 2007.

Yongmin (Max) Zang

Instructor

Education

Ph.D., University of Miami, 2012 (Economics)

FAU Experience

August 2013 - present: Instructor, Department of Economics

June 2013- July 2013: Adjunct Professor, Department of Economics

Primary Teaching Interests/Teaching Load

Principles of Microeconomics: 1/1
Principles of Macroeconomics: 1/1
Introductory Econometrics: 1/1
Intermediate Macroeconomics: 1/1

Primary Research Interests

Applied Econometrics, Labor Economics

Recent Publications

N/A

Economics Department Ranking of Journals

TIER 1		
	1	American Economic Review
	2	Econometrica
	3	International Economic Review
	4	Journal of Econometrics
	5	Journal of Economic Theory
	6	Journal of Finance
	7	Journal of Financial Economics
	8	Journal of Monetary Economics
	9	Journal of Political Economy
	10	Quarterly Journal of Economics
	11	Review of Economic Studies
	12	Review of Economics and Statistics
	13	Review of Financial Studies
TIER 2		
	1	Canadian Journal of Economics
	2	Econometric Theory
	3	Economic Inquiry
	4	Economic Journal
	5	Economic Theory
	6	Economica
	7	Economics Letters
	8	European Economic Review
	9	Games and Economic Behavior
	10	Industrial and Labor Relations Review
	11	International Journal of Game Theory
	12	International Journal of Industrial Organization
	13	Journal of Accounting and Economics
	14	Journal of Applied Econometrics
	15	Journal of Banking and Finance
	16	Journal of Business and Economic Statistics
	17	Journal of Development Economics
	18	Journal of Economic Behavior and Organization
	19	Journal of Economic Dynamics and Control
	20	Journal of Economic Growth

Journal of Economic History
Journal of Environmental Economics and Management
Journal of Financial and Quantitative Analysis
Journal of Financial Intermediation
Journal of Health Economics
Journal of Human Resources
Journal of Industrial Economics
Journal of International Economics
Journal of International Money and Finance
Journal of Labor Economics
Journal of Law and Economics
Journal of Law Economics and Organization
Journal of Mathematical Economics
Journal of Money Credit and Banking
Journal of Public Economics
Journal of Risk and Uncertainty
Journal of Urban Economics
Land Economics
Macroeconomic Dynamics
Oxford Bulletin of Economics and Statistics
Oxford Economic Papers
Public Choice
Rand Journal of Economics
Review of Economic Dynamics
Scandinavian Journal of Economics
Social Choice and Welfare
Southern Economic Journal
Theory and Decision

TIER 3

1	Acta Oeconomica
2	Applied Economics
3	Contemporary Economic Policy
4	Economic Development and Cultural Change
5	Economic History Review
6	Economic Record
7	Economics and Philosophy
8	Economics of Education Review
9	Environmental Resources Economics
10	Explorations in Economic History

11	Financial Analysts Journal
12	Financial Management
13	Industrial Relations
14	International Labor Review
15	Journal of Comparative Economics
16	Journal of Corporate Finance
17	Journal of Derivatives
18	Journal of Development Studies
19	Journal of Economic Education
20	Journal of Economic Studies
21	Journal of Economics and Management Strategy
22	Journal of Economics-Zeitschrift fur Volkwirtshaft and Socialpolitik
23	Journal of Empirical Finance
24	Journal of Financial Research
25	Journal of Financial Services Research
26	Journal of Forecasting
27	Journal of Futures Markets
28	Journal of Macroeconomics
29	Journal of Policy Analysis and Management
30	Journal of Population Economics
31	Journal of Portfolio Management
32	Journal of Real Estate Finance
33	Journal of Regulatory Economics
34	Journal of Risk and Insurance
35	Journal of Transport Economics and Policy
36	Kyklos
37	Labour Economics
38	Mathematical Finance
39	Monthly Labor Review
40	Oxford Review of Economic Policy
41	Population and Development Review
42	Public Finance
43	Public Finance Review (formerly, Public Finance Quarterly)
44	Real Estate Economics
45	Regional Science and Urban Economics
46	Review of Industrial Organization
47	Review of Radical Political Economy
48	Scottish Journal of Economics
49	Urban Studies
50	Weltwirtschaftliches Archiv
51	World Bank Economic Review
52	World Development

World Economy

TIER 4

(All EconLit Journals not in Tiers 1, 2, or 3)