

Florida Atlantic University Academic Program Review Self-Study Report

Program: Economics

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A. 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 communications 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 analyses 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 statement is tied directly to several key aspects of the University's 2015-2025 Strategic Plan; A Strategic Plan for the Race to Excellence. The foundations of this document are the Pillars and Platforms which are reproduced below.

Integration with the University Strategic Plan

Pillars and Platforms

These areas of focus will guide institutional goals and strategic actions.

Pillars define institutional programs focused on creating knowledge that benefits society.

<u>Healthy Aging:</u> Health and wellness, Geriatrics and aging in place, Drug discovery, Health policy, health equity, and health economics, Stem cell research and regenerative medicine.

<u>Neuroscience:</u> Dementia and Alzheimer's disease, Psychiatric illnesses and mental health, Spinal cord injuries, eye disease, and cognition, Communication disorders.

<u>Ocean Science and Engineering /Environmental Sciences</u>: Health of the Everglades and the Atlantic Ocean, including river basins, Harnessing energy from the environment, Technologies that contribute to national security.

<u>Sensing and Smart Systems:</u> Sensor technology that can measure changes in the health of people or environments, and which advance automation.

Platforms represent scholarly activities that apply to and support all Pillars.

Big Data Analytics: Develop tools to store, sort, and mine large datasets.

<u>Community Engagement and Economic Development:</u> Work with communities to develop tools to address challenges and uncover solutions that promote community development and economic prosperity.

<u>Diversity</u>: Identify and promote opportunities to diversify our students, faculty, and staff - and build institutional cross-cultural competencies.

<u>Global Perspectives and Participation:</u> Identify opportunities to share technology, discoveries and learning with other institutions across the U.S. and the globe.

<u>Healthy and Environmentally Sustainable Campus:</u> Identify opportunities to incorporate scholarship into campus operations.

<u>Leadership</u>, <u>Innovation and Entrepreneurship</u>: Engage faculty, staff and students in professional development of leadership skills, identify intellectual property, license IP and promote a culture of startup companies for faculty and students.

<u>Peace, Justice, and Human Rights:</u> Develop programs that share best practices and promote tolerance and understanding of diverse cultures.

<u>South Florida Culture:</u> The region as an international hub for the arts and the humanities.

<u>Undergraduate Research and Inquiry:</u> Distinction through discovery and research experiences that promote scholarship and graduation.

The Economics Department is currently or has plans to support nearly all of the objectives detailed in the Strategic Plan as indicated below.

Healthy Aging

The lone health economist in the COB is currently housed in the Health Administration section of the Management Department. Even so, the Economics Department offers in health economics that is taken by all students in health administration. The course is taught by faculty from health administration and economics. Also, there is considerable research collaboration between Health Administration and Economics.

<u>Neuroscience</u>

We currently have no faculty in neuro-economics but have interviewed candidates with some expertise in the area but, to date, this was an area of secondary importance and departmental demands led us in a different direction. This is likely and area in which we will likely revisit later.

Ocean Science and Engineering / Environmental Sciences

Economics is involved here through the undergraduate course we offer in environmental economics. Our faculty have conducted research on the impact of noise and water pollution on house prices, impact of the proximity of registered sex offenders of house prices, and the impact or residing in a food desert on house prices.

Big Data Analytics

Since the previous review, the department has added two faculty members in econometrics/ applied econometrics. The most recent hire has expertise in both data-analytics and we expect to shortly offer an undergraduate course in the area. The department also teaches econometrics courses at the graduate level and these offerings may be expanded as the new hire comes fully onboard. Econometrics is also an active area of research in the department, particularly for our most recent hire.

Community Engagement and Economic Development

This platform is addressed by 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 and, thus, may also impact the *South Florida Culture* platform.

Diversity

We have a diverse faculty and FAU has a very diverse student body. We could do more in this area as a department.

Global Perspectives and Participation

Several members of the department regularly co-author with individuals at other institutions inside and outside the U.S. Faculty members are involved in teaching programs outside the U.S. and another member of the department has been trying, in conjunction with other faculty members, to develop an international program in Israel. Faculty have also been invited to several countries for research presentations and collaborations.

Healthy and Environmentally Sustainable Campus

Not certain of our contributions in this area. This should be considered in the future.

Leadership, Innovation and Entrepreneurship

Since the last review we hired a faculty member with expertise in entrepreneurship. This individual may eventually offer a graduate course in entrepreneurship in support of the Ph.D. in entrepreneurship housed in the Management Department.

Peace, Justice, and Human Rights

We have faculty prepared to teach courses in Public Choice and the Economics of Terrorism, both of which provide an economic point of view to many of the issues in the platform. We have also examined the possibility of a law and economics course for undergraduates.

South Florida Culture

See Community Engagement and Economic Development above.

Undergraduate Research and Inquiry

Currently, we support undergraduate research through BEPI, the Business and Economics Polling Initiative. BEPI students have made research presentations at conferences on campus and around the US.

In addition, the department has an approved Honors Program that will eventually lead to undergraduate research (if we can get the program started). The pandemic was not helpful in this regard.

Program Highlights

The Economics Department offers two degrees, a B.S. and a B.B.A. The General Economics program is a social science-oriented program and leads to a B.S. degree. The Business Economics program is geared towards students looking for a career in business. The Business Economics program leads to a B.B.A. or a B.S., depending on whether the student has taken extra quantitative course. The department also offers an MS in Economics and participates in the executive concentration of the Ph.D. program.

The undergraduate curriculum is in a state of change as our number of majors has fallen from 1000 to 100. We are trying to find our way in the offer of electives between the minimum enrollment requirements coming from the Provost's office and the service courses we are currently obligated to teach for other departments. As a result, in my opinion, we are not presently in position to offer a very interesting economics degree.

To somewhat offset this issue we have started an Honors Program but have yet to successfully launch. We currently have an economics club but the pandemic has ruined anything based on face-to-face contact.

Our master's program is rolling along and we are currently exploring the possibility of initiating a fully online MS in Economics to pitch to large organizations like the military. We are presently trying to separate our current master's program into two tracks, one of which will be for terminal masters students and the other track will be aimed at those wishing to complete a Ph.D. either at FAU or elsewhere.

The executive concentration in the Ph.D. program has provided an avenue to introduce additional members of our faculty to dissertation-writing students with the hope that this avenue will provide increased doctoral committee opportunities for our faculty.

Faculty/Staff

At the time of the previous review the Economics Department consisted primarily of two distinct groups. One group of faculty arrived before the previous Chair. This group tended to be less research active but came into the office every day. The second group was hired after the previous Chair. This group is more research active but spends little time in the office. Research collaborations between the two groups did not exist. The more research active group tends to work by themselves or with individuals elsewhere.

Since the time of the last review there have been five new hires. This third group could be characterized as writing many more papers per person, co-authoring with people inside and outside the department, and coming into work nearly every day. The hope is that these new hires can somehow be the engine to drive untapped research potential of the entire department.

The department has currently 16 faculty, five of which have been hired since the last review, and two instructors. With declining enrollments we rely less on adjuncts but those we do use perform very well.

The faculty are very involved in faculty governance. Many serve on editorial boards and contribute significant reviews. Conference attendance has declined largely due to the pandemic but research activities have not stopped.

The external profile of the department has improved tremendously due to the efforts of Monica Escaleras, BEPI and Dr. Will Luther's expertise on bitcoin and the economy in general.

B. Last External Review: Economics - Strategic Goals and Action Plans

Goal 1: To strengthen the profile of the department and improve its contribution to the college's teaching mission.

In recent years, two events have shaped the instructional trajectory of the department. The MS in Economics has grown impressively, so much so that the department has raised its admissions criteria to maintain student enrollments at a level consistent with faculty resources. The result has been an improvement in the quality of students matriculated in the program. The undergraduate program in economics has also grown considerably. This is primarily due to the 2.0 GPA admission criteria for the major, which is lower than the criteria for other majors in the college. The result of the latter is a combination of students who are trying to raise their GPAs and switch to different majors, and others who seek to stay in the major. The latter include very talented students for whom the challenge is to enhance learning opportunities.

These two events in recent years inform the following action plans. First, the department will sustain the trajectory of building a very high quality MS in Economics program through any number of initiatives that ensure high quality student admissions, substantive and cutting edge curricula, on-time graduate rates, well-publicized graduate placements, outreach to prospective private and public employers, and sustained relationships with alumni. Second, the department will strategize on the best way to enhance the educational opportunities for outstanding students majoring in economics. One possibility could be an Honors Program in economics, a component of which may include the following strategic goal. Third, investment in faculty resources should be commensurate with the implementation of the two prior action plans.

Update and Progress on Goal 1:

The MS program enrollments continue to be strong although they tend to be counter-cyclical. There are several changes to the program that are currently being discussed that should improve the quality and quantity of incoming MS students.

- a. We are considering waiving the GMAT/GRE requirement for students from either mathematics or the sciences to encourage admissions.
- b. We are considering the possibility of a fully online MS program which we hope to offer to external groups including the military. This initiative is currently on hold due to the impact of the pandemic on available start-up resources.

- c. We currently have a committee formed to examine a. and b. above and examine the benefits and costs of a two-tiered MS program. One track would be for terminal MS students. The other track, which would include more advanced work in microeconomics, macroeconomics, and econometrics, should appeal to students interested in pursuing Ph.D.s in economics elsewhere. The second track will provide excellent preparation for those students pursuing Ph.D.s concentrations in either finance or accounting at FAU.
- d. A proposal is also being prepared for faculty review that will establish an accelerated program in economics that will allow our best undergraduates to get credit for master's-level classes and be ready admits to our MA program, starting the program with 9 hours of graduate credit.
- e. The department recently established an Honors Program in economics based on offering Honors sections of Intermediate Microeconomics, Intermediate Macroeconomics, and Introduction to Econometrics. In place of the usual Cases course, Honors students will take a senior seminar class which will involve undergraduate research. Even though the program is on the books, we are having some trouble getting started because the pandemic has dimmed the appeal of small, personalized instruction.

Goal 2: To enhance participation in the Quality Enhancement Plan (QEP) for economics majors.

The following action plans should be implemented. First, the department should integrate research into its undergraduate curriculum. Initially, this should be done by developing an Honors version of an existing course that involves a QEP project. Given the variance of the student population, this will allow the department to better serve those economics majors with strong academic skills and engage them in research and inquiry. After the initial two years, the department should consider-the possibility of developing an Honors Program to further increase the visibility of its undergraduate program. Second, students participating in QEP projects should be encouraged to submit manuscripts to the FAU Undergraduate Research Journal. Economics faculty should also participate in the QEP initiative by collaborating with students and serving on the editorial review board of the FAU journal, perhaps on a rotating annual basis.

Update and Progress on Goal 2:

As noted in 1e. above, the department has an approved Honors Program. The capstone course for the program is a seminar class that should lead to publishable research.

Another option we will investigate is to simply offer the Senior Seminar Research Class as an alternative to our current capstone *Cases* course for exceptional students. This option would increase undergraduate research without requiring the students involved to complete the entire Honors Program.

Goal 3: To improve coordination among faculty on course content and assessment.

The following action plans should be implemented. First, a vehicle should be created to ensure currency and consistency of course content for multiple/large section courses and reinvigorate assessment protocols to ensure ongoing student improvement. Second, a review of the undergraduate and graduate curricula should be undertaken to ensure that redundancies are eliminated, potential gaps are filled, and new topics are explored. This should be implemented by subsets of faculty teaching in either the undergraduate or graduate programs.

Update and Progress on Goal 3:

Although this is a good idea, we have made little progress in this area. The two main complications are that the number of majors has fallen to just over 100 and we are in the midst of a pandemic. These issues create a recurring problem with the number and kind of electives offered. This is actually a bigger problem for us currently. We cannot easily coordinate because we have little discretion in what is offered and what is likely to be demanded by students. Our major has effectively been watered down by all of the service courses we count as electives.

Goal 4: To build affiliations among the department's faculty and faculty in other disciplines who share interests in similar areas of research.

The action plan provides opportunities for collaboration with faculty in other departments who share an interest in participating in proposed Centers for International Business and Business Analytics (as specified in other Strategic Goals and Action Plans). This collaboration could have important consequences for expanding research, identifying interdisciplinary projects, providing opportunity for working with graduate students, and increasing the visibility of the college.

Update and Progress on Goal 4:

These collaborations occur naturally because much of the research inside and outside the COB is basically applied microeconomics. Since the last review the department has added three individuals with good econometric/applied econometrics skills that can and will facilitate co-authorship: Chris Boudreaux, Steve Caudill, and Long Liu. In addition, the department hired Joao Faria who applies dynamic games to everything. The increased co-authorship is already evident. Also, two of the individuals above, Chris Boudreaux and Long Liu, were hired in support of the University's strategic plan: Chris in support of entrepreneurship and Long in support of data analytics.

Goal 5: To improve/expand graduate course offerings through ongoing collaboration with the Department of Finance.

The following action plans should be implemented. First, a third course in econometrics will be created to provide Ph.D. students in finance knowledge in advanced panel data and cross-section techniques that are important for empirical research.

Second, the Economics Department will also provide support to the Finance Ph.D. program by offering economics courses that focus on theoretical foundations relevant for finance. Third, investment in faculty resources should be commensurate with the two prior action plans.

Update and Progress on Goal 5:

As mentioned in 1c. above we are investigating the establishment of a second track in our MS program which will include Ph.D. level courses to prepare finance and possibly accounting Ph.D. students for field courses in their area. The first year in most Finance Ph.D. programs usually consists entirely of economics courses. The success of this initiative will depend on whether we can get the Finance Department on board with the idea, otherwise enrollment will be insufficient.

Goal 6: To attract academically strong students to the economics majors.

Given the math content of economics courses, the department should increase its efforts to recruit students with a strong math background. First, the Economics Department should explore the possibility of collaborating with the FAU Math Department in their Math Day activities which involve local high school and middle school students participating in math competitions. Second, the department should consider a program to work with local schools and host an economic-statistics event in which middle- and high-school students participate in ASA's K-12 poster and project competitions.

Update and Progress on Goal 6:

We could do more work on this goal but we are hoping the Honors Program will help attract strong students to our program. We are considering initiatives, mentioned above, that should make our graduate program more attractive.

Goal 7: To increase the visibility of the Department of Economics and the College of Business and contribute to the economic development of South Florida.

Two initiatives are under way to attain this goal. First, a center will be created that performs public opinion survey research on important economic and business issues relevant to the South Florida community. Second, another center will be developed that focuses on applied economics research and policy analysis pertaining to the South Florida economy. This latter will generate economic reports and forecasts useful to regional

planners and policy makers, executives of private companies and public institutions, the media, and researchers in any number of areas.

Update and Progress on Goal 7:

These two initiatives have come to fruition. We now have the Business and Economics Polling Initiative, directed by Dr. Monica Escaleras, which has provided tremendous visibility to the University, the COB, and the department. The South Florida Business and Research Initiative is also up and running although presently it is behind BEPI as far as impact.

In addition, we recently hired Dr. Will Luther, an economist with expertise in macro, monetary, and bitcoin issues. Dr. Luther has appeared on NPR and has been cited in the WSJ. His contributions to our visibility have been substantial is his short time with us.

C. Instruction

Baccalaureate Programs

The Economics Department offers two degrees, a B.S. and a B.B.A. The General Economics program is a social science-oriented program and leads to a B.S. degree. The Business Economics program is geared towards students looking for a career in business. The Business Economics program leads to a B.B.A. or a B.S., depending on whether the student has taken extra quantitative courses.

Enrollment Information for Economics Department

The enrollment for the Economics Department is found in the tables below. Notable is that the number of degrees awarded has dropped from nearly 100 a year to 39 last year; the number of "majors" dropped from 900 to 105. This is due to two changes. One, for a period of time the admissions to the College of Business majors were relatively high compared to the economics majors. This meant that the economics program became a holding tank for business majors not really wanting to be economics majors. However, some did remain in the major and graduated. The department raised its standards to be on a par with the College of Business. Two, the University passed an undergraduate general studies degree, which also took some pressure off the economics major as a holding tank. Credit hours also fell as fewer majors went through the economics coursework.

Table 1 contains information on enrollment by degree program and the impact of the change in GPA for admission to the BS program is both obvious and dramatic. Enrollment fell from a high of 1274 in AY 15-16 to only 58 for AY 19-20.

Table 1. Enrollment by Degree Program

Year	BBA	BS
AY 14-15	78	1216
AY 15-16	88	1274
AY 16-17	92	505
AY 17-18	90	178
AY 18-19	82	89
AY 19-20	93	58

The same effect is apparent in Table 2 which is a headcount on the number of majors in economics. The total steadily fell from a high of 900 in AY 15-16 to 105 in AY 19-20.

Table 2. Majors in Economics (headcount)

Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Total	760	900	527	229	129	105

Minors

The Economics Department offers several minors. The Economics Minor for non-business majors requires Intermediate Microeconomics, Intermediate Macroeconomics plus three economics electives. The International Economics Minor for non-business majors requires Intermediate Microeconomics, Intermediate Macroeconomics plus the three international economics electives. The Economics Minor for business majors requires three upper-division economics courses. Table 3 contains information on the number of minors in economics which has also steadily declined since the last review but for a different reason. In an effort to improve our score on the SUS metrics, FAU began to discourage additional coursework (minors) in order to reduce time until graduation. Minors all around the university system suffered as a result. The number of students minoring in economics is today about one-third of the peak value in AY 15-16.

Table 3. Minors in Economics

Year	14-15	15-16	16-17	17-18	18-19	19-20
ECON	183	199	177	131	82	63
ECOI	6	4	1	1	1	3

Table 4. Degrees Awarded by Type

Year	BBA-ECOB	BBA-ECON	BS-ECOB	BS-ECON	TOTALS
14-15	30	0	4	71	105
15-16	26	5	6	58	95
16-17	24	12	1	58	95
17-18	28	4	2	49	83
18-19	22	0	1	28	51
19-20	21	2	1	19	43
TOTALS	151	23	15	283	482

In addition, the average class size has been increasing since the last review. The Provost's office has offered guidance on minimum class sizes with oversight provided by the enrollment management staff in the Dean's office. This fact, along with increased use of Lecture Capture Video Steaming (LCVS), has resulted in increased undergraduate class sizes as indicated in Table 5.

Table 5. Average Undergraduate Class Size

Year	14-15	15-16	16-17	17-18	18-19
Size	65.1	75	67.8	71	75.6

Demographics

Information of the demographic make-up of the undergraduate economics majors is given in Table 6. The table compares the number and percentages of our undergraduate majors in Fall 2014 and Fall 2019.

The table contains information on gender, ethnicity and race. As the tables shows the percentages are fairly stable in the two time periods save for a few exceptions. In particular, the percent Hispanic has fallen from 2014 to 2019 and the percent male has increased during the same period.

Table 6. *Demographics*

CATEGORY	Fall 2014	Fall 2019
	Count-Percent	Count-Percent
NOT HISPANIC	544-75.6%	64-64.6%
HISPANIC	176-24.4%	35-35.4%
ASIAN	27-4.1%	2-2.2%
BLACK	166-25.0%	21-23.3%
2 OR MORE RACES	27-4.1%	5-5.6%
PACIFIC ISLANDER	2-0.3%	0-0%
NATIVE AMERICAN	0-0%	1-1.1%
WHITE	441-66.5%	61-67.8%
NO ANSWER	74	13
FEMALE	331-44.9%	30-29.1%
MALE	406-55.1%	73-70.9%

Admission and Advising Procedures

The following section from the catalog describes the admissions requirements for each of the two programs. The General Economics program requires the two principles courses plus a calculus course. The Business Economics program adds accounting courses, statistics, English courses, as well as a basic computer course.

General Economics: Pass the following pre-major courses, ECO 2013, ECO 2023 and MAC 2233, with grades of "C" or better. For pre-Economics admissions GPA calculation, only the highest grade of multiple attempts is used. Note: Students who have attempted any of the pre-Economics admissions courses more than three times, including withdrawals ("W"), cannot be admitted.

Business Economics: All of the following are required for admission to upper-division selective majors in the College of Business:

Attain a Pre-Business admissions GPA of 2.5 on the courses noted in parentheses below that are relative to success in business programs (ECO 2013, ECO 2023, ACG 2021, ACG 2071, MAC 2233, STA 2023, ENC 1101, ENC 1102 and ISM 2000) with grades of "C" or better. For Pre-Business admissions GPA calculation, only the highest grade of multiple attempts is used. Note: Students who have attempted any of the Pre-Business admissions courses three or more times, including withdrawals ("W"), cannot be admitted to a selective business major. 2. Earn 60 credits. 3. Complete the foreign language entry (FLENT) requirements.

Advising: The mission of Student Academic Services (SAS) in the College of Business at Florida Atlantic University is to provide academic advising that empowers students to make informed choices about their education. Through curriculum planning, SAS help students maintain continuous progress toward a timely graduation and the achievement of their academic goals. SAS support economics majors by keeping them informed about University policies and procedures, the resources available to support their success, and guides them through the economics curriculum. SAS encourage economics majors to take advantage of opportunities both inside and outside the classroom that are consistent with their personal ambitions.

There are two broad groups of advisors in the College of Business: Undergraduate Advisors, and Graduate Advisors. There are also content specific advisors embedded in each group. For example, the internship and study abroad advisors relate more to undergraduate advising, and the Career Advisor relates more to graduate students. Both groups work together as a team to provide economics majors with the necessary information to obtain their goal of graduating with a degree from the College of Business, and also to continue their education at Florida Atlantic University. Undergraduate economics majors are often referred to the graduate advisors to explore graduate programs, and at times graduate advisors advise undergraduate economics majors.

Curriculum advising takes place Monday through Friday from 8:00 AM to 4:30 PM. For undergraduate advising, economics majors are able to make appointments to see the advisor of their choice on Mondays, Wednesday, and Fridays; on Tuesdays and Thursdays there is "walkin" advising for which an appointment is not needed. There is a designated advisor for graduate economics majors and for advising, an appointment can be made to see this advisor or students can come to the advising office without an appointment and request to speak with the advisor. In-person advising is the choice of most advisees, but occasionally, telephone or "Skype" advising is requested.

There are two advising offices in the College of Business: one advising is on the Boca Campus and the other is on the Davie Campus. Whereas the Boca Campus office advises undergraduate economics majors and graduate economics majors, the Davie Campus office advises only undergraduate economics majors.

Student Academic Services work together with other departments outside the college to help economics majors graduate in a timely manner. For example, SAS works closely with the Dean of Undergraduate Studies on "Project Graduation" that requires advisors to contact economics majors currently active or in-active, either by phone or email to discuss their remaining courses, and in some instances to find out the reason(s) for inactivity. Economics majors that are close to graduation are often asked to create a plan of action to graduate.

The Career and Internship Division in Student Academic Services works directly with employers to coordinate employment opportunities, internships, class speakers and recruitment activities. There is also a business mentor coach that helps to prepare economics majors for employment after graduation.

Curriculum:

Majors

Pre-Business Foundations:		Credits	General	BBA
Principles of Accounting 1	ACG 2021	3	X	X
Principles of Accounting 2	ACG 2071	3	X	X
Macroeconomic Principles	ECO 2013	3	X	x
Microeconomic Principles	ECO 2023	3	Х	x
Information Systems Fundamentals	ISM 2000	3	X	x
Methods of Calculus	MAC 2233	3	X	x
Introductory Statistics	STA 2023	3	X	x
Business Core:				
Business Law 1	BUL 4421	3		x
Introduction to Business Communication	GEB 3213	3		X
Principles of Financial Management	FIN 3403	3		x
Management Information Systems	ISM 3011	3		x
Introduction to Management and Organizational Behavior	MAN 3025	3		X
Operations Management	MAN 3506	3		x
Global Strategy and Policy	MAN 4720	3		x
Quantitative Methods in Administration	QMB 3600	3		x
Marketing Management	MAR 3023	3		X
Major Courses:				
Four courses in Economic Foundations				
Intermediate Microeconomics (Managerial Economics possible) for Business Track	ECO 3101	3	X	X
Intermediate Macroeconomics	ECO 3203	3	X	X
Introduction to Econometric Methods	ECO 4421	3	X	X

Pre-Business Foundations:		Credits	General	ВВА
Cases in Economic Analysis	ECO 4933	3	X	Х
One course in International Economics	ourse in International Economics ECO 4704			Х
Four additional economics courses (3 credits each at the 3000 level or above)			X	
Two additional economics courses (3 credits each at the 3000 level or above)				Х
One upper level business course elective				Х
Four Social Science courses			X	

Recruitment and Placement Strategies

This is an area in which we certainly could improve but we seem to be hampered by our limited number of majors and our many service offerings which count toward the major so we cannot push forward perhaps the greatest advantage of an economics major and that is flexibility. We do not seem to be able to offer any new and interesting electives. We expect the Honors Program to help with recruitment and placement is we can get the program started and running.

Retention/Persistence/Graduation Rates

Information on the 4 and 6-year graduation rates from AY 12-13 to AY 16-17 are given in Table 7. One can easily see that both graduation rates begin to increase between 2014 and 2016. During these years the advisors made a concerted effort to get students quickly out the door. Also around this time the College of Business instituted that Business General Studies Degree which students were awarded upon successful completion of enough credits to graduate even if specific degree requirements were not met. This degree was implemented to address the metrics upon which all SUS institutions were scored.

Table 7. Undergraduate 4-year and 6-year graduation rates

AY	12-13	13-14	14-15	15-16	16-17
4-year	25.0%	22.6%	32.6%	70.6%	61.9%
6-year	41.3%	40.0%	57.1%	48.1%	53.5%

Placement Rates/Employer Types

There is some data available on median earnings of our recent undergraduates. As Figure 1 shows, over the period 2012-1017, the median salary rose from about \$50,000 to just over \$63,000.

Median Salary \$63,740 \$57,600 \$57,088 \$60K \$52,404 \$50,776 \$50,052 \$40K \$20K \$0K 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016

Figure 1. Median Salary of Recent Graduates

Figure 2 shows the available data on the percentages of graduates employed of continuing their educations. The bar chart covers the period from 2009-2010 to 2017-2018. The percentage employed seems to be on an upward trend but both employed and graduate schools seem to be related to the job market and hence to each other. When the job market is good graduate school admissions are lower and vice versa. These relationships are evident in Figure 2.

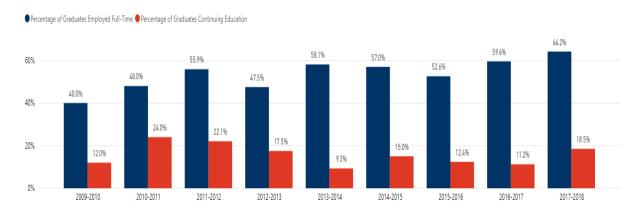


Figure 2. Percentage Employed and Percentage Continuing Education

Graduate Programs: Master of Science (M.S.) in Economics

The department offers coursework leading to the Master of Science (M.S.) degree. Students have a choice between three concentrations (General Economics, Financial Economics, or International Economics). The primary objective is to provide students with a strong foundation of economic modeling with an emphasis on applied econometrics, providing a skillset that prepares graduates for career advancement and/or further economic studies at the doctoral level.

Curriculum, including duration of program and comparison to peer programs, as identified by the unit (including aspirational peers and SUS)

The M.S. program in economics is a 30-credit program designed to be completed in one year. However, students may opt to spread the coursework over a longer period with flexible part-time study. Students may begin the program in any semester, and must select one of the following three concentrations upon admission: General Economics, Financial Economics, or International Economics. Each concentration requires the following coursework (each course is 3 credits):

Completion of four core courses (required for all concentrations):

ECO 6115 (Advanced Microeconomics)

ECO 6206 (Advanced Macroeconomics)

ECO 6403 (Advanced Mathematical Economics) ECO 6246 (Advanced Econometrics)

Completion of two field courses: Based on concentration chosen.

Students may elect to pursue a Master's Thesis which counts as 6 credits, a directed independent study (DIS) for 3 credits, a directed independent research (DIR) for 3 credits, and/or the international field experience for 3 credits.

To satisfy the requirements for the M.S. degree, all graduate coursework must be completed with a minimum GPA of 3.00 and a minimum grade of "C" in all courses.

Admissions Criteria

The M.S. program has a rigorous set of admissions criteria to ensure that students are adequately prepared for graduate studies in economics, with emphasis on the quantitative credentials including prior coursework and test scores.

The minimum admissions criteria include:

Undergraduate GPA of 3.00 (based on the last 60 credits of coursework) from a regionally accredited college or university. Minimum GMAT score of 500 or GRE score of 150 (verbal), 150 (quantitative), and 4 (analytical writing)

Additional admissions criteria to be considered include:

Undergraduate coursework and performance in economics, math, and statistics and letters of recommendation. An interview with the program coordinator (strongly recommended) Exceptions to the above admissions criteria include:

Applicants who already hold an advanced degree (e.g., masters, MBA, J.D., or Ph.D.) from a regionally accredited college or university are exempted from the GMAT or GRE requirement.

Applicants who completed an undergraduate degree in economics at Florida Atlantic University with a minimum GPA of 3.50 may be exempted from the GMAT or GRE requirement at the discretion of the graduate director.

Applicants who do not meet the GPA, GMAT, or GRE requirement but demonstrate an exceptional academic record in quantitative coursework (economics, math, and statistics) may be granted conditional admission.

Enrollment information since the last review is given below in Table 8. The enrollments are strong though countercyclical as with most graduate programs.

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Enrollment	46	49	39	37	34	36
Annualized						
Student Credit Hours	696	849	738	666	708	615

Table 8. Enrollment Information (headcount and annual SCH production)

Description of Internships, Practicum, Study Abroad, Field Experiences

The MS program offers an annual international field experience to Costa Rica each May, in between the Spring and Summer semesters. This one-week tour is among the most popular study abroad experiences offered in the College of Business. This tour has been offered since 2004, with over 600 students having participated. The tour offer 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. Participants complete a research project upon their

return using first-hand observations to complement traditional academic sources. Enrollments in the program since the last review are given below in Table 9.

Table 9. Recent Costa Rica Tours and Number of Participants

Dates	May 2014	May 2015	May2016	May2017	May2018
Participants	32	28	36	32	18

A brief demographic summary of recent entrants into the MS Program is given below in Table 10. The table indicates that roughly one-third of our students are female and approximately half are full time.

Table 10. Demographic Information: M.S. Economics Students

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
%Female	31%	37%	39%	26%	32%	36%
% Full-	38%	46%	42%	44%	48%	56%
Time						

The Department of Economics offers a variety of funding sources to graduate students, including graduate teaching assistantships (GTAs) which offer a tuition waiver and stipend, Provost Fellowships (stipend), and College of Business scholarship awards. The number of assistantships has declined a bit over the period and the department has customarily had one fellowship available. Detailed information is provided in Table 11.

Table 11. Graduate Teaching Assistantships and Fellowships

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
GTAs	13	13	14	11	8	10
Fellowships	2	1	1	1	I	0

The MS program offers extensive and personalized advising by the Program Coordinator, Ms. Michelle Williams, and the Program Director, Dr. Eric Chiang. The advising process is as follows:

Each student meets with Ms. Williams upon acceptance into the program to review the curriculum and policies. A *Plan of Study* proposal is submitted by each student and approved by the graduate director and the graduate advising office. This document details all courses to be completed in the MS program.

Throughout the program, dedicated support from Ms. Williams and Dr. Chiang provide students with a smooth experience to ensure progress toward completing the MS degree. Career advising is provided by dedicated advisors within the Career and Internship Division of the College of Business Student Academic Services.

Placement Rates/Employment Profile

Graduates from the MS Economics program achieve employment at a wide range of companies, government organizations, and academic institutions. The department follows students using LinkedIn to determine their current career situation. Detailed information about recent placements is given in Appendix 1.

Retention Rates

We calculate retention rates based on the percentage of students who continue into their second semester of the one-year program. Because we are selective in our admissions process (with emphasis on ensuring students have an adequate quantitative proficiency), our retention rates are high. Detailed information on retention rates is given in Appendix 2.

Graduation Rates

The number of M.S. Economics degrees awarded by academic year is provided in the table below. The downward trend in these numbers reflect the decline in enrollment over this period, and not the inability of students to complete the program (as evidenced by the very high retention rate).

Table 12. MS Degrees Awarded

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
MS Degrees Awarded	28	15	24	15	13	11

Student Recruitment

Extensive recruitment efforts are undertaken each year to attract highly qualified students from three key potential pools of prospective applicants: undergraduate economics majors at FAU, students from other SUS institutions in Florida, and non-Florida residents. A detailed discussion can be found in Appendix 3.

Table 13 contains enrollment data for the MS program. The enrollments tend to be trending down but with some countercyclical uncertainty.

Table 13. MS Enrollment Data

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Graduation	28	15	24	15	13	11

Pedagogy

In the teaching of mathematics required for economics the application of a concept and technique in specific examples is emphasized. For instance, in the Advanced Mathematical Economics (ECO 6403) class the lectures are often "flipped", adequate reading and video lectures are provided before class and practical problems and discussions in class are often used to introduce those same concepts aided by problem solving.

Faculty

The Department of Economics presently consists of 16 full-time faculty including six professors (one as Chair), seven associate professors (one as an associate dean), one assistant professor, one senior instructor and one instructor. The faculty are all research active to some degree. Abbreviated CVs are provided in Appendix 4.

The period since the last review has been a time of change in the department. In 2014-5 the department had one individual holding the rank of professor. In May of 2015, Steven B. Caudill was hired as Chair and professor and later that year two additional faculty members were promoted to the rank of professor. The year 2015 was the first time the department had more than one professor in many years.

Since the last review the department has seen several new hires and one departure. Not counting the Chair, the department hired four additional professors. The hires were made with an eye towards departmental instructional needs and the strategic plan. As currently constituted the department consists of about half professors and half associate professors so we are somewhat top heavy.

Table 14. Current Faculty and Fields

Faculty Member	Ethnicity/Gender	Rank	Specialization
S. Caudill	White/Male	Professor	Applied Econometrics
M. Escaleras	Hispanic/Female	Professor	Public Policy/Natural Hazards
E. Levy	White/Male	Instructor	NA
K. Yuhn	Asian/Male	Associate	Macro/Econometrics
E. Chiang	White/Male	Associate	Micro/Game Theory
K. Banerjee	Asian/Male	Associate	Math/Micro/Welfare
J. Faria	Hispanic/Male	Professor	Dynamic Games
R. Rhodd	Black/Male	Associate	International/Econometrics
S. Vishwasrao	Asian/Female	Professor	International
W. Bosshardt	White/Male	Professor	Economic Education
S. Ghosh	Asian/Male	Professor	Labor/Micro
C. Boudreaux	White/Male	Associate	Public Choice/
			Entrepreneurship
E. Van Tassel	White/Male	Associate	Macro/Finance
N. Manage	Asian/Female	Associate	Macro/Econometrics
W. Luther	White/Male	Assistant	Monetary
T. Levy	Asian/Female	Senior Instructor	International

The department currently consists of three cohorts. There are a few faculty members remaining from our time under Social Sciences, a second group brought in under the previous Chair, and a third group of those hired since the last review. The present situation suggests that future hires are likely to be made at the assistant professor level.

The department also occasionally uses adjuncts and we have some very good ones available but our trend has been away from adjuncts and instructors as our number of majors had declined. The department is now focused on research more than in past years.

The changes over time can be seen in Table below. In AY 14-15 the department had one professor and 1 professor, no assistant professor and ten associate professors. For the AY 20-21 the department will likely include six professors and nine associate professors pending the successful promotion cases outstanding.

Table 15. Faculty Ranks over Time

	AY 14-15	AY 15-16	AY 16-17	AY 17-18	AY 18-19	AY 19-20
Full	1	4	4	4	4	6
Associate	10	8	8	8	9	7
Assistant	0	0	0	1	2	1
Senior Instructor	0	0	1	1	1	1
Instructor	4	4	1	1	1	1

Tables 16A-C include information of FTEs and SCHs for the department by course division and over time. The total SCHs have remained relatively constant and the FTEs have generally declined. Both remain quite large.

Table 16A.

		Lower Di	vision UG			Upper D	ivision UG	ì
	State Fundable SCH	Non-State Fundable SCH	State Fundable FTE	Non-State Fundable FTE	State Fundable SCH	Non-State Fundable SCH	State Fundable FTE	Non-State Fundable FTE
2014-15	8787	189	293	6.3	10855	198	362	6.6
2015-16	9936	195	331	6.5	10498	150	350	5
2016-17	9132	282	304	9.4	10515	99	351	3.3
2017-18	9225	138	308	4.6	9169	120	306	4
2018-19	9435	93	315	3.1	9325	96	311	3.2
2019-20	9767	303	326	10.1	8317	170	277	5.67

Table 16B.

		MS Prog	gram			Ph.D. Non-State State Fundable Fundable SCH FTE FTE 0 3 0 0 3 0		
	State Fundable SCH	Non-State Fundable SCH	State Fundable FTE	Non-State Fundable FTE	State Fundable SCH	Fundable	Fundable	Fundable
2014-15	708	91.5	30	3.81	72	0	3	0
2015-16	647.5	97.5	27	4.06	63	0	3	0
2016-17	689	142.5	29	5.94	105	0	4	0
2017-18	552	84	23	3.5	96	0	4	0
2018-19	531	48	22	2	117	0	5	0
2019-20	474.5	70.5	20	2.94	93	141	4	5.88

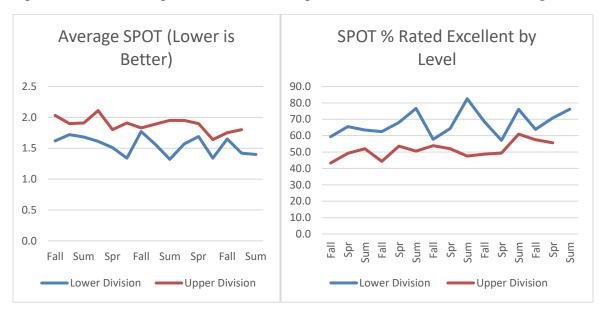
Table 16C. Totals

Table 16C.	Total	Total
Totals	SCH	FTE
2014-15	20900.5	704.71
2015-16	21587	726.56
2016-17	20964.5	706.64
2017-18	19384	653.1
2018-19	19645	661.3
2019-20	19336	651.59

Information on the trends in the Student Perception of Teaching measure (SPOT) is given in Figures 3 and 4. Both are consistent with improved teaching over time.

Figure 3. Recent Average SPOT Score

Figure 4. Recent Excellent SPOT Ratings



Information on faculty demographics is given below in the table below. The table supports the notion that we are a diverse group.

Table 17. Faculty Demographics

Table 17. Faculty Demographics			Economics		College Total	University Total
		2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018- 2019
	Female					
American Indian/Alaskan Native	Male					1
	Total					1
	Female	3	3	3	9	44
Asian or Pacific Islander	Male	5	4	5	21	101
	Total	8	7	8	30	145

Table 17 Faculty Demograp	hics		Economics		College Total	University Total
Table 17. Faculty Demographics		2016- 2017-		2018-	2018-	2018-
	2017	2018	2019	2019	2019	
	Female				5	45
Black (Not of Hispanic Origin)	Male				7	24
	Total				12	69
	Female	1	1	1	3	42
Hispanic	Male			1	7	34
	Total	1	1	2	10	76
	Female	1			34	338
White (Not of Hispanic Origin)	Male	7	7	8	63	411
	Total	8	7	8	97	749
	Female	5	4	4	51	469
Total	Male	12	11	14	98	571
	Total	17	15	18	149	1,040

The department also occasionally relies on adjuncts although the use is down somewhat from the time of the last review, though the Adjuncts we use have Ph.D.s and most have teaching jobs elsewhere.

Assessment and Assurance of Learning

The following sections will outline the goals and assessment of the Economics Program. Part A will list the Economics Learning Goals. Part B gives the Academic Learning Compact for the department. Part C provides the assessment mechanisms. Part D summarized the results of the assessments. Part E describes innovations that the department has undertaken for improvement.

Economics Learning Goals

The establishment of goals for student learning are listed below. A copy of the Academic Learning Compact (ALC) is attached.

Goal 1: Students will possess economics knowledge and be able to recognize the connection between economics, statistics, and mathematics skills

Objectives:

- 1. Students will demonstrate general knowledge of micro- and macroeconomic theories
- 2. Students will demonstrate an understanding of international economics and its application in the global environment
- 3. Students will show an understanding of economic policies (monetary and fiscal) and the use of economic policies through government intervention
- 4. Students will show competency in analyzing and evaluating basic econometrics models

Goal 2: Students will be proficient in the use of statistical software as it applies to economics research and econometric modeling

Objectives:

- 1. Students will be knowledgeable about current statistical applications
- 2. Students will demonstrate the ability to choose and utilize appropriate software for different research questions

Goal 3: Students will be effective communicators

Objective:

Students will demonstrate proficiency in oral communications by preparing and delivering research on economics events and research questions

Goal 4: Students will possess critical thinking skills as they relate to economic events

Objective:

Students will be able to analyze and evaluate economic events

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

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.

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 (Written Communication, Team/Collaborative 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 class 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 (Cases in Economic Analysis), 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.

Assessment Database

Outcome 1 Description

Students will demonstrate knowledge of economic research methods. The methods include collecting relevant and reliable resource and reference material, and identification of relevant economic theories.

ALC Categories: Content Knowledge: Procedural Knowledge (Research Skills)

Communication: Oral communication; Written communication

Critical Thinking: Creative Skills

Implementing Strategy: To accomplish the learning objective, the program will utilize the capstone course, ECO 4933.

Assessment Method: Students will write a research paper in the capstone course, ECO 4933. Faculty teaching ECO 4933 will evaluate a sample of the research papers. The research papers submitted by students in ECO 4933 will be categorized into one of the following three categories: exceeds standards, meets standards, fails to meet standards. The definitions of the three categories is as follows:

- 1. Exceeds 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.
- 2. Meets 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.
- 3. Fails 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.

Criterion for Success: Faculty expectations are that 50% or more of the students' papers will be classified as either exceeding standards or meeting standards.

Data Summary:

A research paper is required in Cases in Economic Analysis Course (ECO 4933).

In the last five years, between 76% and 95% of the students are classified either exceeding or meeting standards.

Outcome 2 Description

Students will demonstrate a basic understanding of fundamental microeconomic concepts, including supply and demand, rational behavior, and the role of prices in resource allocation.

ALC Categories: Content Knowledge: Procedural Knowledge (Technical Skills), Declarative

Knowledge

Communication: NA

Critical Thinking: Creative Skills, Analytical Skills

Implementing Strategy: To accomplish the learning objective, the program will utilize the capstone course, ECO 4933.

Assessment Method: Students will complete a multiple-choice exam in the capstone course ECO 4933. The exam will be composed of questions drawn from a single database. Faculty in the department teaching ECO 4933 will develop and maintain the database of questions. Results of the tests will be shared with faculty in the department. Each exam will be classified into one of the following three categories: exceeds standards, meets standards, fails to meet standards. The definitions of the three categories is as follows:

- 1. Exceeds standards: 75% or more of questions answered correctly.
- 2. Meets standards: Less than 75% and 50% or more of the questions answered correctly.
- 3. Fails to meet standards: Less than 50% of the questions answered.

Criterion for Success: Faculty expectations are that 50% or more of the students will have exams that are classified as either exceeding standards or meeting standards.

Data Summary:

A multiple-choice exam was completed in Cases in Economic Analysis Course (ECO 4933).

In the last five years, between 88% and 95% of the students are classified either exceeding or meeting standards.

Outcome 3 Description

Students will demonstrate an ability to write short economics papers that is grammatically correct, well organized, and focused on a main point or argument.

ALC Categories: Content Knowledge: Procedural Knowledge (Technical Skills); Procedural

Knowledge (Research Skills)

Communication: Team/Collaborative communication; Oral

communication; Written communication

Critical Thinking: Creative Skills; Analytical Skills

Implementing Strategy: To accomplish the learning objective, the program will utilize the capstone course, ECO 4933.

Assessment Method: Student will be required to write short papers in ECO 4933. Faculty teaching ECO 4933 will review and assess a sample of the research papers. Faculty reviewing the papers will assign each paper to one of the three following categories: exceeds standards, meets standards, fails to meet standards. The definition of the three categories is as follows:

- 1. Exceeds standards: Shows evidence of a clear, assertive, insightful thesis, controlling idea, main point, or argument; demonstrates creative and/or effective command of discipline-appropriate structure; each section develops a main idea carefully, makes through use of appropriate examples and evidence, and has a logical relationship to other paragraphs and subpoints; shows special attention to audience needs in providing background information, such as using advanced command of discipline's conventions; consistently employs effective transitions between ideas; consistently follows standards for academic communications, (grammar, spelling, punctuation, etc.)
- 2. Meets standards: Shows evidence of a basic thesis, controlling idea, main point, or argument; uses structure appropriate to the discipline; each section develops a main idea, offers examples and evidence, and suggests some relationship to other paragraphs and sub-points; includes necessary background information for intended audience; generally employs some form of transition between ideas; generally follows standards for academic communications, grammar, spelling, punctuation, etc.)
- 3. Fails to meet standards: Has no clear thesis, controlling idea, main point, or argument; fails to use structure appropriate to the discipline; each section is unrelated to other paragraphs or sub-points and offer inadequate or inappropriate examples and evidence; does not consider intended audience for the communication; fails to employ transition between ideas; fails to use or violates standards for academic communications (grammar, spelling, punctuation, etc.)

Criterion for Success: Faculty expectations are that 50% or more of the students will submit papers/short writing projects that either meet standards or exceed standards.

Data Summary:

In the last five years, between 75% and 95% of the students are classified either exceeding or meeting standards.

Outcome 4 Description

Students will prepare and make an oral presentation.

ALC Categories: Content Knowledge: Procedural Knowledge (Research Skills)

Communication: Team/Collaborative communication;

Multimedia/Graphic communication; Oral communication; Written

communication

Critical Thinking: Creative Skills; Analytical Skills

Implementing Strategy: To accomplish the learning objective, the program will utilize the capstone course, ECO 4933.

Assessment Method: Students will give an oral presentation during class in ECO 4933. The oral presentation will be classified into one of the following three categories: exceeds standards, meets standards, fails to meet standards. The definition of the three categories is as follows:

- 1. Exceeds standards: Rehearsed and memorized speech, maintained eye contact with audience, spoke clearly and audibly with no distracting gestures or fillers, used visual aids appropriately, well-paced, made clear and relevant points, excellent organization, answered questions effectively.
- 2. Meets 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, answered questions adequately.
- 3. Fails 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, failed to answer questions adequately.

Criterion for Success: Faculty expectations are that 50% or more of the students' oral presentations will be classified as either exceeding standards or meeting standards.

Data Summary:

In the last five years, between 68% and 86% of the students are classified either exceeding or meeting standards.

Outcome 5 Description

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

ALC Categories: Content Knowledge: Procedural Knowledge (Technical Skills)

Communication: NA

Critical Thinking: Creative Skills; Analytical Skills

Implementing Strategy: To accomplish the learning objective, the program will utilize the capstone course, ECO 4933.

Assessment Method: Students will be required to write a position paper in ECO 4933. The requirements of the paper are that the student select a social issue or problem, identify relevant economic theories, and then apply theory to develop and defend a position on the topic. Faculty will assign each paper to one of the following three categories: exceeds standards, meets standards, fails to meet standards. The definitions of the three categories is as follows:

- 1. Exceeds standards: Accurately interpreted information/evidence/data, identified relevant issues, analyzed and weighed the key options, justified assumptions and reasons, drew logical conclusions.
- 2. Meets 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.
- 3. Fails 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.

Criterion for Success: Faculty expectations are that 50% or more of the students will submit papers that are classified as either exceeding standards or meeting standards.

Data Summary:

In the last five years, between 85% and 95% of the students are classified either exceeding or meeting standards.

Table 18. Summary Assessment Data

	2015	2016	2017	2018	2019
Outcome 1					
Above expectations	30%	30%	35%	35%	47.40%
Meets expectations	46%	46%	60%	60%	47.40%
Below expectations	24%	24%	5%	5%	5.2%
Outcome 2					
Above expectations	44%	44%	42.10%	6%	16.70%
Meets expectations	44%	44%	52.60%	79%	72.20%
Below expectations	12%	12%	5.30%	5%	11.10%
Outcome 3					
Above or meets	75%	75%	75%	91%	95%
Below expectations	25%	25%	25%	9%	5%
Outcome 4					
Above expectations	38%	38%	30%	43%	10%
Meets expectations	46%	46%	45%	43%	58%
Below expectations	16%	16%	20%	13%	32%
Outcome 5					
Above expectations	35%	35%	35%	45%	47.40%
Meets expectations	50%	50%	50%	50%	47.40%
Below expectations	15%	15%	15%	5%	5.2%

Continuous Program Improvement

For the previous five years 2015-2020, the baccalaureate program in economics used our capstone course ECO 4933 (Cases of Economic Analysis) to assess content knowledge, communication skills and critical thinking skills.

In ECO 4933, students are expected to complete a multiple-choice questions exam, write a research paper, give oral presentations to demonstrate solid knowledge of micro-and macroeconomics content, to be able to apply this knowledge to actual cases and current issues.

Results of our assessment report indicate that our objectives in all areas have been met and we hope to make improvements in the future as we continue to look for ways to improve our program and help students to complete the degree program while maintaining our rigorous standards. All faculty are encouraged to include more essay/short answer questions in their exams when possible. There are a few upper-level classes that are having students conduct group projects to improve collaborative/team communication.

Overall, the faculty were satisfied with students' performance based on the assessment outcomes.

The following are some of the highlights of our continuous program improvements:

Rigorous standards: In 2015-2016, we implemented minimum admission standards for the previously open access (students only needed an overall 2.0 GPA to be admitted) part of our degree program. The previously low standard led to a vastly inflated number of majors and the open access put students outside the usual core sequence. The continuous strong student performance in recent years can be attributed to the higher admission standards. These improved standards allow for a more rigorous and effective curriculum that have improved the academic achievements of students.

New Courses: We have added a combined International course ECO 3703 (International Economics) to combine International Trade, International Monetary Policy, International Development, a research-based course ECO 4915 (Public Opinion Research) and ECO 4504 (Economics of the Public Sector).

Modified Courses: A bigger section of ECS 3013 (International Economic Development) has been offered to accommodate the need for non-economics majors from the College of Business.

Coordination among courses: The coordination among courses has been improved by adjusting the sequencing of our offered courses and the combined international course. We were able to offer a few electives such as ECP 4302 (Environmental Economics).

Honors Program: In 2020, our Honors Program was established and approved. The Honors Program is described in its entirety later in this document.

In all upper-level course, we will encourage the inclusion of research assignments or assignments requiring some form of scientific inquiry. Faculty will be encouraged to give more term papers and stress the basics of grammar and punctuation to improve students' written communication. We will implement more open discussions in class and include short oral presentations where possible to improve students' oral communications. To improve critical thinking skills, we will try to include more elements of applied theories to help students link classroom learning to real life application and policy analysis.

D. Research

Research in the department of economics is journal article based. This fact is clear from Table 18 below and we are not in the business of writing books. There are some in the department who are and have been engaged in writing textbooks but these are not research products. Faculty can and do make presentations at professional meetings but these are, at best, an intermediate output and are much consequential and the actual journal publications, particularly because conference submissions are not typically refereed in economics. Table 18 indicates that the department production of research articles has remained fairly stable over the three-year study. However, research has likely increased since last review.

In an effort to demonstrate as much data on faculty members was collected via google scholar on an annual basis from the time of the last review until the present. This data series counts publications of faculty in the calendar they joined FAU whether or not they worked at FAU for the entire year. This method examines faculty output, not just output while at FAU and in this way provides a measure of output. This information is given below in Table 20. The table shows annual output per faculty member has nearly tripled since the last review.

As scholars we fully understand that the number journal articles published is perhaps not the best measure of research output as there is no quality adjustment. All journals are not created equal. An additional complication is that the department previously used a highly specific journal list (basically a subset of the Econ ABS 3 and 4 journals). Currently the evaluation of research is based on publications on ABS list. Clearly, the quantity of publications has gone up over time and with this increase in quantity one would also anticipate an increase in quality of publications as the probability of an ABS-level acceptance increases and those faculty previously targeting only the very narrow economics list expand their opportunities to pursue publications in other areas.

Table 19: Total Departmental Research Output 16-7 to 18-9

	Economics			College Total	University Total
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018-2019
1. Books (including monographs & compositions)	0	0	0	3	95
2. Other peer-reviewed publications	14	15	15	137	1,376
3. All other publications	1	0	0	35	565
4. Presentations at professional meetings or	13	18	18	168	1,676
5. Productions/Performances/Exhibitions	0	0	0	0	514
6. Grant Proposals Submitted	0	0	0	4	290

Table 20: Total Research Output by Current Faculty from Google Scholar

	2014	2015	2016	2017	2018	2019	2020
Refereed Pubs	13	12	24	21	31	40	37
Total TT Faculty	11	12	12	13	15	14	15
Pubs/Faculty	1.18	1.00	2.00	1.62	2.07	2.86	2.47

Table 21: Efficiency Data	Economics			College Total	University Total
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018-2019
Books (including monographs & compositions) per faculty member	0.0	0.0	0.0	0.0	0.1
2. Other peer-review publications per faculty member	1.3	1.3	1.1	1.5	2.0
3. All other publications per faculty member	0.1	0.0	0.0	0.4	0.8

Table 21: Efficiency Data	Economics			College Total	University Total
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018-2019
4. Presentations at professional meetings or conferences per faculty member	1.2	1.5	1.3	1.9	2.4
5. Productions/Performances/Exhibitions per faculty member	0.0	0.0	0.0	0.0	0.7
6. Grant proposals submitted per faculty member	0.0	0.0	0.0	0.0	0.0

The department has had some success in collaborative efforts with internal and external partners to promote research and scholarship and this aspect of our research profile should improve in the future. We have added five new professors since the last review. Two of the new hires are very research-active and collaborate with many individuals inside and outside economics. Two of the new hires work in the area of econometrics which easily lends itself lends itself to collaboration with others and may also provide a bridge to the Data Analytics group housed in the Information Technology and Operations Management Department (ITOM). One of the new hires had a field in entrepreneurship which is housed in the Management Department at FAU so a natural bridge is created there as well. One of the new hires spent two visiting stints at the University of Corsica. For the established Faculty, one professor recently visited at UNLV and another visited at a University in Korea.

Readers are referred to <u>Appendices 5</u>, <u>6</u>, and <u>7</u> for additional descriptions.

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 are detailed in <u>Appendix 6</u>. In addition, however, and tied to the promotion of local/regional economic development is the relatively new South Florida Business and Economics Research Initiative, detailed in <u>Appendix 7</u>.

E. Service and Community Engagement

The department is very active in service to the college and the University as Tables 22 and 23 indicate. Even these tables likely understate our service contributions because, unlike publications, record-keeping in not an essential part of the process. Individuals may forget committee work but are not likely to forget publications.

In fact, we have two or three individuals who serve on as many committees as possible. We are grateful for their service as, in my opinion, the University has too many committees.

In this assessment, we should not forget about informal "service." As a new Chair in an excessively form-driven world, I often consult those faculty with much FAU experience for advice. FAU is not easy for an outsider to fathom quickly. My faculty have been extremely helpful in this regard, although I wish as manager that I did not require so much help.

Table 22: Service Contributions of the Department

	E	conomic	College	University	
	16-17	17-18	18-19	18-19	18-19
Faculty memberships on department, college or university committees	48	35	13	299	2,561
2. Faculty memberships on community or professional committees	24	16	12	122	1,246
3. Faculty serving as editors or referees for professional publications	4	10	10	146	619

Table 23: Per Capita Service Contributions

	E	conomic	College	University	
	16-17	17-18	18-19	18-19	18-19
Faculty memberships on department, college or university committees per faculty member	4.4	2.9	0.9	3.3	3.7
Faculty memberships on community or professional committees per faculty member	2.2	1.3	0.9	1.4	1.8
3. Faculty serving as editors or referees for professional publications per faculty member	0.4	0.8	0.7	1.6	0.9

F. SWOT: Strengths and Opportunities

Strengths

Research-active faculty

Nice location

Historically low teaching loads

Summer grant program (if it continues)

Honors Program

Expertise in Econometrics

Funding for all usual faculty needs

Extremely helpful staff in all areas in the COB

Teaching possible in many formats, locations, and times of day

Opportunities

New faculty should enhance co-authorship opportunities

Fully online MS Program

Expanded MS offerings to yield non-thesis MS for Ph.D. students in other departments

Law and Economics Center

Expanded co-authorship opportunities due to empirical expertise

Finding a spot on the data analytics bandwagon

Advisory Board for Honors Program

Make Honors Sections available to all students meeting specified minimum GPA requirements

Offering more Econometrics electives in the MS Program

G. SWOT: Weaknesses and Threats

Weaknesses

The elective problem

High cost of living

Low salaries and raises

Late arrival to COB

Enrollment decline

Many faculty members are rarely in the office

Summer research program aside, the only incentive for research appears to be promotion raises.

Threats

Online/video teaching may eliminate or greatly reduce demand for faculty

Pandemic

Low enrollments

Minimum class size requirements-starting anything new is more difficult

Merger with Finance Department

H. Resource Analysis

FAU is a member of the Florida SUS but is not one of the large universities at the top of the food chain. Funding has always been an issue in Florida, even at the larger institutions. The largest manifestation of the funding problem has been faculty raises. For years everyone in economics has known that to move to a university in Florida one must get a very good offer because the starting salary is likely to be closer to the ending salary than at many other institutions.

The COB and the Department of Economics have been somewhat immune from some of these problems because soon after Dean Gropper's arrival, the greatly expanded Executive Programs provided additional compensation for teaching opportunities along with a summer grant program based on research output. These opportunities have benefitted both excellent teachers and excellent researchers.

Resources have been sufficient so that we have been able to hire research-active individuals with established research programs. Although some in the department may disagree, the department Chair would always prefer to hire — for about the same salary — an established scholar rather than hire a new Ph.D., who may or may not have figured things out yet. We have so far not lost anyone because our offer was too low. Those we have hired have had an immediate impact on research productivity.

Funds for travel have not been an impediment save for the few occasions in which individuals have requested funds for travel outside the US. There are a few individuals in the COB who try to go to as many conferences as possible each year but none of these individuals are in the Economics Department. In any case, presentations at meetings is not, in my view, critical to the production of research in our area.

We have had no issues with the availability of either computer software or hardware.

I. Future Direction of the Department

Below are some of the initiatives the department is either currently pursuing or currently investigating:

- 1. The department expects to have a functioning Honors Program up and running in the near future.
- 2. The department expects to have an advisory council/board attached to the Honors Program to provide guidance and assistance with job placement.
- 3. The department is currently studying the addition of a more rigorous tract for our master's program which will prepare students for second year research- focused Ph.D. courses in finance and accounting.
- 4. The department is considering the implementation of a fully online master's program to pitch to the military and other organizations.

J. Questions for the review team:

- 1. As previously stated, the department offers so many sections of service courses that also count as electives that it makes offering *actual* electives (courses taken after intermediate micro and intermediate macro) very difficult. Although flexibility is a big advantage of an econ major perhaps we would be better off eliminating "electives" as the School of Accounting did some years ago and simply *require* the additional 3 or 4 course "electives" that would make our graduates strong and competitive in the labor market. Our guess is that the result would be fewer and better economics graduates. Any advice?
- 1B. Should the department consider offering something approximating a full slate of electives, many of which would be taught as *Directed Independent Studies* to a few interested students?
- 2. Any ideas on getting faculty to spend more time in the office? Are there any benefits to having people come in to the office?
- 3. Any suggestions as to how the department might leverage expertise in econometrics into the data/business analytics realm at the undergraduate and graduate levels?

- 4. The current capstone course is *Cases in Economic Analysis*. Given the current emphasis on undergraduate research, should this course be replaced with a Senior Seminar course in which the students write a draft of a publishable research paper?
- 5. Should the department seek to become a local affiliate of the Stavros Center for Economic Education located at USF?
- 6. Any suggestions about how to raise funds for the South Florida Business and Economics Initiative would be appreciated.
- 7. The University has a very diverse student population. The Provost is seeking to increase the diversity among faculty and staff. Do you have any best practices you can share that could provide guidance for hiring in the future?
- 8. The pandemic is having an enormous impact on course delivery. It is not clear what long term impact this will have on course delivery in the future. Do you have any reflections on how we should think about and plan for course delivery in the future? What might be the goals and optimal consequences of future course delivery for pedagogy? For efficiencies? For rankings?

Appendix 1. Recent Graduate Placements

2014-2015 MS Economics Graduates

- -Business Operations Specialist at Boeing, Inc.
- -Financial Compliance Officer at FINRA
- -Financial Consultant at inDinero
- -Financial Analyst at Bank of Korea
- -Regional Originations Manager at Westlake Financial Services
- -Professor of Business Analytics at Wilmington University

2015 - 2016 MS Economics Graduates

- -Pricing Analyst at Royal Caribbean
- -Senior Trading Associate at Tios Capital
- -Portfolio Analyst at First State Bank
- -Digital Marketing Analyst at TBC Corporation
- -Ph.D. Students in Economics at University of Florida

2016 - 2017 MS Economies Graduates

- -Senior Consultant at Deloitte
- -Marketing Manager at ZRS Management
- -Client Program Manager at Cirque du Soleil Entertainment
- -Risk Consultant Analyst at PwC
- -Research Analyst at Woolbright Development

2017 - 2018 MS Economics Graduates

- -Financial Analyst at Lockheed Martin
- -Economic Analyst at Mather Economics, LLC.

- -Business Strategy Associate at Health Insurance Innovations, Inc.
- -Professor at Lynn University
- -Ph.D. Student in Economics at Florida State University

2018 - 2019 MS Economics Graduates

- -Senior Analyst at Turnkey Trading Partners
- -Assistant Professor of Economics at Palm Beach State College
- -Ph.D. Student in Finance at Florida Atlantic University
- -Automobile Accountant at Rick Case Auto Group
- -Mortgage Loan Originator at Prime Equity Financial Corp.

Appendix 2. MS semester to semester retention percentages

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Fall to	93%	89%	92%	91%	91%	100%
Spring						
Spring to Fall	67%	89%	100%	80%	83%	100%
Academic Year Retention Rate	85%	89%	94%	88%	88%	100%

Appendix 3. A Summary of MS Recruitment Efforts

Application for the FAU Graduate Recruitment Grant. These funds are awarded by the FAU Graduate College and are used toward travel expenses (e.g. hotel costs for visiting prospective students), open house events, and promotional items. The Provost Fellowship provides students with an additional stipend of \$2,500 per year. Recruiting funds and fellowships received are:

2014-2015: \$2,000 and 2 Provost Fellowships

2015 -2016: \$1,000 and 1 Provost Fellowship

2016-2017: \$1,000 and 1 Provost Fellowship

2017 -2018: \$1,000 and 1 Provost Fellowship

2018-2019: \$1,000 and 1 Provost Fellowship

2019-2020: \$2,500 and 0 Provost Fellowship

Open House and Welcome Events: These events are held in April of each year, and involve the cooperation of faculty and current graduate assistants to welcome new and prospective students to the MS program. A typical program includes:

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 (hosted by current graduate assistants) 1:00 - 1:30pm: Meet the Faculty (hosted by the graduate faculty)

1:30 - 2:00pm: Campus Tour Qed by current graduate students)

Classroom Visits: Each semester, the Graduate Director or the Program Coordinator visits the capstone courses to introduce the M.S. program and to encourage students to apply.

Additional Recruitment Efforts: With the cooperation of other SUS universities in Florida, we are able to acquire email lists of graduating seniors with GPAs meeting our admissions requirements, from which we send information on our M.S. program.

Appendix 4. Brief Faculty Resumes (Including Publications 2018 to present)

KUNTAL BANERJEE

Education

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

FAU Experience

Assistant Professor, August 2007-July, 2014 Associate Professor, August 2014 to present.

Primary Teaching Interests/Teaching Load

Principles of Economics, Mathematical Economics and Advanced Mathematical Economics: Load2/2

Primary Research Interests

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

Recent Publications

How Stationarity Contradicts Intergenerational Equity (with Geir Asheim and Tapan Mitra) accepted Economic Theory.

Banerjee, K., Mitra, T. (2018). On Wold's Sufficiency Approach to Representation of Preferences. *Journal of Mathematical Economics*, 79, 65-74.

Banerjee, K. (2018). On the Representability of a Class of Lexicographic Preferences.

Economics Bulletin, 38, 1213-1218.

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

Bosshardt, W., Walstad, W. (2019). Grades in Economics and Other Undergraduate Courses.

AEA Papers and Proceedings 2019, 109: 1-6.

Bosshardt, W., Walstad, W. (2019). The Undergraduate Economics Coursework of Elementary and Secondary School *Teachers*. *Journal of Economic Education*, *50(4)*, 410-417.

Bosshardt, W., Walstad, W. (2018). Does Studying Economics in College Influence Loan Decisions Later in Life. *Journal of Economic Education*, 49(2), 130-141.

Bosshardt, W., Chiang, E. (2018). Evaluating the Effect of Online Principles Courses on Long-Term Outcomes. *International Review of Economics Education*, 28, 1-10.

CHRISTOPHER BOUDREAUX

Education

Ph.D., Florida State University, 2014 (Economics) MS, Florida State University, 2011 (Economics) BS, Nicholls State University, 2009.

FAU Experience

Assistant Professor, August 2007 to July 2020 Associate Professor, August 2020 to present.

Primary Teaching Interests/Teaching Load

Principles of Economics, Mathematical Economics and Advanced Mathematical Economics: Load2/2

Primary Research Interests

Public Choice, Entrepreneurship

Recent Publications

Boudreaux, C. (2020). Ethnic Diversity and Small Business Venturing. *Small Business Economics*, *54*(1), 25-41.

Nikolaev, B., Boudreaux, C., Wood, M. (2020). Entrepreneurship and subjective well-being: the mediating role of psychological functioning. *Entrepreneurship Theory and Practice*, 44(3).

Boudreaux, C., Nikolaev, B. (2019). Capital is not enough: Opportunity entrepreneurship and formal institutions. *Small Business Economics*, *53*(3), 709-738.

Walia, B., Boudreaux, C. (2019). Hospital Mergers, Acquisitions, and Regulatory Policy Implications: Price, Cost, Access, and Market Power Effects. *Managerial Finance*, *45(10111)*, 1354-1362.

Boudreaux, C., Escaleras, M., Skidmore, M. (2019). Natural Disasters and Entrepreneurship Activity. *Economics Letters*, *182*, 82-85.

Boudreaux, C., Nikolaev, B., Klein, P. (2019). Socio-cognitive traits and entrepreneurship: The moderating role of economic institutions. *Journal of Business Venturing*, *34*(1), 178-196.

Boudreaux, C., Holcombe, R. (2018). Is Institutional Improvement Possible? *Applied Economics Letters*, 25(11), 758-761.

Jha, A., Boudreaux, C., Banarjee, V. (2018). Political Leanings and Social Capital.

Journal of Behavioral and Experimental Economics, 72(C), 95-105.

Boudreaux, C., Nikolaev, B., Holcombe, R. (2018). Corruption and destructive entrepreneurship. *Small Business Economics*, *51(1)*, 181-202.

Nikolaev, B., Boudreaux, C., Palich, L. (2018). Cross-country determinants of early stage necessity and opportunity-motivated entrepreneurship: accounting for model uncertainty. *Journal of Small Business Management.*

STEVEN B. CAUDILL

Education

Ph.D., University of Florida, 1982 (Economics)

FAU Experience

Kaye Distinguished Professor and Chair, 2015 to present

Primary Teaching Interests/Teaching Load

Principles of Microeconomics, Economics of Sports, Managerial Economics, and Econometrics: Load 1/1

Primary Research Interests

Econometrics, Applied Econometrics, Applied Microeconomics

Recent Publications

Refereed Journal Articles

V. Tennekoon and S. Caudill (in press). Estimation of a Selectivity Model with Misclassified Selection. *Communications in Statistics-Case Studies and Data Analysis.*

S. Caudill, F.G. Mixon, M. Costello, and E. Affuso (in press). Food Deserts and Residential Real

Estate Prices, Journal of Housing Research

Caudill, S., Prunetti, D., Detotto, C. (in press). Bargaining Power in Apartment Sales in Corsica: A Latent Class Approach (forthcoming). *Urban Studies*.

Carrasco-Gallego, J. A., Caudill, S., Mixon, F. G., Cebula, R. J. (in press). Hunting Land Quality and Hunting Land Lease Prices: Evidence from Decomposition of Latent- Class Model Estimates (forthcoming). *Journal for Studies in Economics and Econometrics*.

Mixon, Jr., F. G., Calderon, D., Caudill, S. (2019). Valuing Recreational Water Clarity and Quality: Evidence from Bedonie Pricing Models of Lakeshore Properties. Applied Economics Letters, 26(3), 237-244.

Mixon, Jr., F. G., Affuso, E., Starnes, K., Caudill, S. (2019). Is Airport Proximity an Amenity or Disamenity? An Empirical Investigation based on House Prices. *Land Economics*, *95(3)*, 391-408.

Caudill, S., Crofton, S., Faria, J. R., Manage, N. D., Mixon, F., Simonton, M. G. (2019).

Property confiscation and the intergenerational transmission of education in post-1948 Eastern Europe. *Public Choice*, 1-41; https://doi.org/10.1007/sl1127-019-00698-0.

Caudill, S., Mixon Jr., F. G., Richards, M. (2019). Ownership Structure and Hospital Service Costs and Fees: A Decomposition Approach. *Managerial and Decision Economics*, 40(1), 37-50.

Hourican, S., Mixon, Jr., F. G., Caudill, S. (2018). Does College Football Impact the Size of University Applicant Pools and the Quality of Entering Students? *Applied Economics*, *50*, 1885-1890.

Mixon, Jr., F. G., Caudill, S. (2018). Guarding Giants: Resource Commons Quality and Informal Property Rights in Big-Wave Surfing. *Empirical Economics*, *54*(4), 1697-1715.

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: 2/2

Primary Research Interests

Economic Education; International Development; Network Competition

Recent Publications

Sumell, A., Chiang, E. (2019). Are Your Students Absent, Not Absent, or Present?

Mindfulness and Student Performance. Journal of Economic Education, 50, 1-16.

Vishwasrao, S., Schneider, M., Chiang, E. (2019). The Effect of Military Occupations on Growth. *Kyklos*, 72(1), 183-207.

Bosshardt, W., Chiang, E. (2018). Evaluating the Effect of Online Principles Courses on Long-Term Outcomes. *International Review of Economics Education*, 28, 1-10.

MONICA P. ESCALERAS

Education

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

FAU Experience

Aug 2019-present: Professor, Department of Economics

Aug 2010-July 2019: 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

Mitsova, D., Escaleras, M., Esnard, A., Sapat, A., Lamadrid, A. (2019). The Effects of Infrastructure Service Disruptions and Socio-Economic Vulnerability on Hurricane Recovery. *Sustainability*, *11(2)*,516-532.

Escaleras, M., Dukhong, K., Wagner, K. (2019). You Are Who You Think You Are: Linked Fate and Vote Choices Among Latino Voters. *Politics & Policy, 47,* 909-930.

Boudreaux, C., Escaleras, M., Skidmore, M. (2019). Natural Disasters and Entrepreneurship Activity. *Economics Letters*, *182*, 82-85.

Escaleras, M., Calcagno, P. T. (2018). Does Fiscal Decentralization Affect Infrastructure Quality? An Examination of U.S. States. *Contemporary Economic Policy*, 36(2), 410-422.

JOAO FARIA

Education

Ph.D., University of Kent at Canterbury, 1998 (Economics) MA, University of Brasilia, 1991 (Economics)

BA, University of Brasilia, 1988 (Economics) BA, University of Brasilia, 1987 (Geography)

FAU Experience

Associate Professor, August 2018 to July 2019 Professor, August 2019 to present.

Primary Teaching Interests/Teaching Load

Intermediate Microeconomics, Intermediate Macroeconomics, Economics of International Trade, and International Economic Development (all at FAU) and many other courses.

Load2/2

Primary Research Interests

Microeconomic Theory, Dynamic Games

Recent Publications

Faria, J. R., J.C. Cuestas, L. Gil-Alana and E. Mourelle (forthcoming) Self-employment by gender in the EU: convergence and clusters (forthcoming) *Empirica*.

Faria, J. R., Mixon, F., Mirror, Mirror on the wall, Modeling the U.S. Congress as an internal labor market (2020) *Journal of Public Finance and Public Choice*.

Faria, J. R., A. Novak, A. Bagchi and T. Mathews, The refugee game: The relationship between individual security expenditures. Games 11, 24.

Faria, J. R., Mixon, F., Johnson, K., Ferreira, J., Wanke, P. (in press). Agglomeration economies and university program creation in the knowledge economy (forthcoming). *Socio-Economic Planning Sciences*.

Faria, J. R., Mixon, F. (in press). The Peter and Dilbert principles applied to academe (forthcoming). *Economics of Governance*.

Faria, J. R., Mixon, F., Upadhyaya, K. (in press). Editor reputation and journal quality: The case of regional association journals (forthcoming). *B.E. Journal of Economic Analysis and Policy.*

- Faria, J. R., Silva, E. (2020). Leadership delegation in rotten kid families. *Journal of Population Economics*, 33(2), 441-460.
- Faria, J. R., Bagchi, A., Matthews, T. (2019). A model of a multilateral proxy war with spillovers. *Public Choice, 179,* 229-248.
- Faria, J. R., Mixon, F., Upadhyaya, K. (2019). Alumni donations and university reputation. *Education Economics*, *27*, 155-165.
- Faria, J. R., Mixon, F., Upadhyaya, A., Upadhyaya, K. (2019). Gang Rivalry and Crime: A Differential Game Approach. *Review of Law & Economics*, 15(2).
- Faria, J. R., Mixon, F., Upadhyaya, K. (2019). Public policy and the university-industry R&D nexus. Knowledge Management Research and Practice, 17(4), 499-506.
- Faria, J. R., Matthews, T., Bagchi, A. (2019). Simple analytics of the impact of terror generation on attacker-defender interactions. *Public Choice*, *179*, 287-299.
- Faria, J. R., Gropper, D., Mixon, F., Santoyo, J. (2019). Academic scholarship, organization prestige and the earnings of U.S. business school deans. *Managerial and Decision Economics*, 40(7), 823-837.
- Caudill, S., Crofton, S., Faria, J. R., Manage, N. D., Mixon, F., Simonton, M. G. (2019). Property confiscation and the intergenerational transmission of education in post- 1948 Eastern Europe. *Public Choice*, 1-41; https://doi.org/10.1007/sl l 127-019-00698-0.
- Faria, J. R., Mixon, F. (2018). Entrepreneurial philanthropy and university creation. *Journal of the Knowledge Economy*, *9*, 1067-1086.
- Faria, J. R., Arce, D. (2018). On the Samaritan's dilemma, foreign aid and freedom. *Economies*, *6*(4), 53; https://doi.org/10.3390/economies6040053.
- Faria, J. R., Wanke, P., Ferreira, J., Mixon, F. (2018). Research and innovation in higher education: Emperical evidence from research and patenting in Brazil. *Scientometrics*, *116*, 487-504.
- Faria, J. R., McAdam, P. (2018). The green golden rule: Habits and anticipation of future consumption. *Economics Letters*, *172*, 131-133.
- Faria, J. R., Oliveira, A., Silva, E. (2018). Transnational terrorism: Externalities and coalition formation. *Journal of Conflict Resolution*, *62*, 496-528.

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

Devaro, J., Ghosh, S., Zoghi, C. Job Characteristics and Discrimination in Firms. *Industrial Relations: a journal of economy and society.*

Devaro, J., Ghosh, S., Zoghi, C. (2018). Job Characteristics and Labor Market Discrimination in Promotions. *Industrial Relations: a journal of economy and society*, 57(3), 389-434.

ERIC J LEVY

Education

University of Florida - First year Ph.D. 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.

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 (with a course release)

Primary Research Interests

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

Recent Publications

LONG LIU

Education

Ph.D., Syracuse University, 2008 (Economics). MA, Renmin University, 2001 (Management). BA, Renmin University, 1998 (Economics).

FAU Experience

Associate Professor: August 2019 to present.

Primary Teaching Interests/Teaching Load

Econometrics, 2/2

Primary Research Interests

Econometrics, Panel Data

Recent Publications

Books

Kao, C., Liu, L. (2019). High Dimensional Econometrics and Identification. *High Dimensional Econometrics and Identification*. World Scientific.

Refereed Journal Articles

Baltagi, B.H., Kao, C., Liu, L. (in press). Testing for Shifts in a Time Trend Panel Data Model with Serially Correlated Error Component Disturbances (forthcoming). *Econometric Reviews*.

Lien, D., Xu, H., Liu, L. (2019). Impact of the Disclosure of Audit Engagement Partners on Audit Quality: Evidence from the United States. *International Journal of Auditing, 23(1),* 112-124.

WILL LUTHER

Education

Ph.D., George Mason University, 2012. (Economics) MA, George Mason University, 2011, (Economics). BA, Capital University, 2008, (Economics).

FAU Experience

Assistant Professor, August 2018 to present

Primary Teaching Interests/Teaching Load

Intermediate Macroeconomics, Money and Banking, Advanced Macroeconomics, Advanced Monetary Economics: Load 2/2

Primary Research Interests

Macroeconomics, Monetary Economics

Book Chapters

Hogan, T., Luther, W. (in press). SuboptIntermediate Macroeconomics, Money and Banking, Advanced Macroecommimal Equilibria from Nominal Income Targeting (forthcoming). Journal of Private Enterprise.

Luther, W., Boettke, P. J., Stein, S. M. (in press). Labor Economics from an Austrian Perspective (forthcoming). In Bruce Kaufman (Ed.), *Models of Labor Markets*. Stanford University Press.

Refereed Journal Articles

Luther, W. (in press). Four Principles for a Base Money Regime (forthcoming). *The Cato Journal*.

Luther, W., Hazlett, P. K. (in press). Is Bitcoin Money? And What That Means (forthcoming). *Quarterly Review of Economics and Finance.*

Luther, W. (in press). Regulatory Ambiguity in the Market for Bitcoin (forthcoming). *The Review of Austrian Economics*.

Luther, W. (in press). Regulating Bitcoin: On What Grounds? (forthcoming). *Journal of New Finance*.

Luther, W., Salter, A. W. (2019). Adaptation and Central Banking. *Public Choice, 180(3),* 243-256.

Luther, W., Hogan, T. (2019). Endogenous Matching and Money with Random Consumption Preferences. *B.E. Journal of Theoretical Economics*, 19(2), 1-9.

Luther, W. (2019). Getting off the Ground: The Case of Bitcoin. *Journal of Institutional Economics*, 15(2), 189-205.

Luther, W., McElyea, J.P. (2018). Austrian Macroeconomics in Search of its Uniqueness. *Journal of Private Enterprise*, *33*(2), 1-20.

Luther, W. (2018). Is Bitcoin Intrinsically Worthless? *Journal of Private Enterprise, 33(1),* 31-45.

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/I 993-1/1996: Associate Dean, College of Social Science

8/1992-6/1996: Program Director, Social Statistics Program, College of Social Science 8/I 992-6/1996: 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

Recent Publications

Caudill, S., Crofton, S., Faria, J. R., Manage, N. D., Mixon, F., Simonton, M. G. (2019).

Property confiscation and the intergenerational transmission of education in post- 1948 Eastern Europe. *Public Choice,* 1-41; https://doi.org/10.1007/sl I 127-019-00698-0.

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 Refereed Journal Articles

Archibald, C. M., Barnes, C. I., Rhodd, R., Adenmos11I4 E. O. (2019). "Not in My House": Perspectives on HIV/AIDS of Afro-Caribbean Adolescents Living in South Florida *Journal of Religion and Health*, *58*(5), 1857-1871.

Schrouder, S., Allen, M. T., Rhodd, R., Jones, T. (2019). Evidence of Faculty Salary Differences Across Business Disciplines and Employment Contracting Systems. *International Journal of Accounting and Financial Reporting*, *9*(1), 469.

Liu, M., Rhodd, R. (2018). Review and Comments on Accrual Accounting Valuation Models. *International Journal of Accounting and Finance Reporting*, 8(1), 1-12.

Rhodd, R., Schrouder, S., Kolo, J. (2018). Strategies for Spatial and Economic Development. *Annals of Social Science & Management Studies*, 1(3).

Rhodd, R. (2018). Strategies for Spatial and Economic Development. *Annals of Social Sciences & Management Studies*, 1(3).

Liu, M., Rhodd, R. (2018). Review and Comments on Accrual Accounting Valuation Models. *International Journal of Accounting and Financial Reporting, 8(1),* 37.

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

Van Tassel, E. (in press). Relationship lending and liquidation under imperfect information (forthcoming). *Journal of Financial Services Research*.

Van Tassel, E. (2018). Multiple borrowing and adverse selection in credit markets. *Oxford Economics Papers*, 70(1), 286-299.

SHARMILA VISHWASRAO

Education

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

FAU Experience

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

Primary Teaching Interests/ Teaching Load

International Development Economics, graduate and undergraduate. Principles of Microeconomics.

3/2 or2/2

Primary Research Interests

International, Health

Recent Publications

Bernet, P., Gumus, G., Vishwasrao, S. (2020). Maternal Mortality and Public Health Programs: Evidence from Florida, *The Milbank Quarterly*, *98*(1), 150-171.

Vishwasrao, S., Schneider, M., Chiang, E. (2019). The Effect of Military Occupations on Growth. *Kyklos*, 72(1), 183-207.

Bernet, P., Gumus, G., Vishwasrao, S. (2018). Effectiveness of Public Health Spending on Infant Mortality in Florida, 2001-2014. *Social Science and Medicine*, *21J*, 31-38.

Gardner, L., Vishwasrao, S. (2018). Physicians' use of medical technology: an analysis of the introduction and subsequent failure of drug-eluting stents. *Applied Economics*, *50(24)*, 2733-2745.

KY 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: Internet Coast Adams of Professor, College of Business

Teaching Load: 2/2

Primary Research Interests

Asset pricing and market volatility; Economic growth and technological change

Recent Publications

Yuhn, K.-H., Kim, S. B., McCown, J. (2018). Stock Returns, Velocity Dynamics and Inflation Volatility. *European Journal of Finance*, *24*(*18*), 1755-1771.

Appendix 5. Business and Economics Polling Initiative

Initiative Goals

The Business and Economics Polling Initiative (BEPI) was launched in August of 2014 with four main goals that are aligned with the objectives of the University: FAU's name recognition, undergraduate research, interdisciplinary collaboration and community engagement.

The Business and Economics Polling Initiative has had an extraordinary impact inside and outside the University. In less than seven years the Initiative has become the "Gallup" of Florida in terms of public opinion research. We have become the leader in polling that the media and the community see as the go-to source for measuring public opinion in Florida and beyond; thus enhancing FAU's visibility and reputation at the local, regional and national levels. In addition, align with the "undergraduate research and inquiry" strategic plan platform, the Business and Economics Polling Initiative provides students with valuable opportunities to enhance their educational experience by designing and carrying out public opinion research. Furthermore, every year since the inception of the Initiative at least half of the students representing FAU at the Florida Undergraduate Research Conference (regional) and the National Conference of Undergraduate Research (national) are from BEPI. Finally, the Business and Economics Polling Initiative has partnered with faculty in other colleges from FAU and the community to conduct public opinion research.

Initiative Faculty

Director: Professor Monica Escaleras

Monica Escaleras: Hispanic (origin: Ecuador), Professor of Economics, Full time faculty, Academic Specialties: Macroeconomics and Political Economy

Professor Escaleras oversees all areas of the Business and Economics Polling Initiative.

Specifically, she is in charge in designing all surveys, analyzing the data and writing reports. In addition, Professor Escaleras teaches "hands on" public opinion research to undergraduate students and takes them to present their research findings at the Florida Undergraduate Research Conference (FURC) and the National Conference of Undergraduate Research (NCUR). Finally, Professor Escaleras looks for opportunities to partner with our community and faculty from other colleges to conduct public opinion research.

Assistant Director: Mr. Eric Levy

Eric Levy: American, Instructor of Economics, Full time faculty

Mr. Levy is in charge of the data collection of all the surveys of the Initiative. In addition, he assists in teaching undergraduate students and he travels with the students to conferences.

Initiative Research Collaborations

The Business and Economics Polling Initiative has collaborated with faculty from other colleges on projects that conduct public opinion research.

<u>School of Public Administration</u>: The Business and Economics Polling Initiative collaborated in a project funded via a RAPID grant from the National Science Foundation (NSF) to investigate the implications of COVID-19 for hurricane-prone areas. PI: Alka Sapat

<u>School of Public Administration</u>: The Business and Economics Polling Initiative collaborated in a project funded by the Abacoa Foundation to investigate the disaster readiness and resilience of older adults in Southeast Florida. PI: Alka Sapat

School of Urban and Regional Planning: The Business and Economics Polling Initiative collaborated with Diana Mitsova and Alka Sapat in conducting a public opinion survey for the *Probabilistic Resilience Assessment of Interdependent Systems project* (NSF grant: \$296,7930). Specifically, the goal of the survey was to capture Floridians perceptions on infrastructure resilience and decision to evacuate or shelter during Hurricane Irma. PI: Diana Mitsova

<u>Center for Environmental Studies</u>: Business and Economics Polling Initiative partnered with the Center for Environmental Studies to conduct a quarterly Florida Climate Resilience Survey. The main purpose of the survey is to gauge Floridians' views on their preparedness and resilience to climate hazards.

<u>College of Medicine</u>: The Business and Economics Polling Initiative collaborated with Elaine Van Der Put (Senior Associate Dean for Administration) in designing a survey to capture the community's level of awareness of the College of Medicine and to measure their interest on the FAU primary care clinic. The results of the survey will be used to develop the marketing strategies for the launch of the "FAU MEDICINE" brand which is part of the strategic plan of the college.

<u>Department of Political Science</u>: The Business and Economics Polling Initiative collaborated with Kevin Wagner and Dukhong Kim in a project that analyzes whether Latino voters are more likely to act based on the view that their individual fates are connected with those of their racial or ethnic group, or are more likely to act based on individual self-interest.

<u>College of Education</u>: The Business and Economics Polling Initiative collaborated with Maria Vasquez-Colina (Associate professor) on a survey regarding Hispanics views on the effectiveness of standardized tests as a tool of classroom assessment.

Research Goals

When the Business and Economics Polling Initiative was funded one of the goals was for the initiative to facilitate survey design, data collection and analysis of data for research projects.

Below are the academic publications that have come out from collaborating with Business and Economics Polling Initiative for survey design, data collection and analysis:

- Mitsova D., A. M. Esnard, A. Sapat, A. Lamadrid, M. Escaleras, and C. Velarde-Perez.
 "Effects of Infrastructure Service Disruptions Following Hurricane Irma: A Multi-Level Analysis of Post-Disaster Recovery Outcomes," Natural Hazards Review, forthcoming
- Vasquez-Colina M. and J. Morris. "Hispanic Parents' Self Evaluation on Assessment Knowledge," *Journal of Latinos and Education*, forthcoming
- Escaleras, M., K. Dukhong and K. Wagner. "You Are Who You Think You Are: Linked Fate and Vote Choices Among Latino Voters," *Politics & Policy*, October 2019, 47, 909-930.
- Mitsova D., M. Escaleras, A. Esnard, A. Sapat and A. Lamadrid. "The Effects of Infrastructure Service Disruptions and Socio-Economic Vulnerability on Hurricane Recovery," Sustainability, January 2019, 11, 516-532.

Initiative Service and Community Engagement

The Business and Economics Polling Initiative (BEPI) offers leadership and expertise on public opinion research to our community. Below are the projects that the Business and Economics Polling Initiative has partnered with the community to conduct scientific polls.

- 1. March 2019: The Clear Water Coalition of Indian River County and the Brevard Indian River Lagoon Coalition partner with BEPI to conduct a survey regarding Floridians' attitudes about Florida's quality of water and waterways.
- 2. April 2018: The USA Today Network newspapers partnered with BEPI to conduct a scientific survey to address what issues are most important to Floridians for the Midterm elections; which served as a foundation for a series of articles for the Florida Voices project. The announcement of the launch of the Florida Voices project and partnership with the Business and Economics Polling Initiative was published on the front page of all six newspapers of the USA Today Network-Florida giving FAU significant media exposure and recognition across Florida. The six newspapers of the USA Today Network-Florida include Florida Today in Melbourne, The New-Press in Fort Myers, Naples Daily News, Pensacola News Journal, Tallahassee Democrats and TCPalm on the Treasure Coast. Furthermore, the results of the

- poll have appeared in several articles of *Florida Voices* project on all six newspapers of the USA Today Network-Florida (couple articles are in supplemental section).
- 3. <u>November of 2017</u>: The League of Women Voters partnered with the Business and Economics Polling Initiative to conduct a survey regarding Floridians' perspectives on the Electoral College. The results were published in the following newspapers: *Florida Today, Florida Politics* and *Orlando Weekly*.
- 4. <u>August 2016</u>: The *Sun Sentinel* partnered with BEPI to conduct a poll regarding the Democratic primary congressional race of Florida's 23rd congressional district. Residents of South Florida were asked their views on the candidates and on current issues. The results were published in *Sun Sentinel* front page and *Miami Herald*.
- 5. <u>December 2015</u>: The *Sun Sentinel* partnered with BEPI to conduct a survey about the views of Cubans residents of Miami-Dade County on the "wet foot, dry foot policy" and other topics related to Cuban immigrants. The results were published in the *Sun Sentinel*.

Other Program Goals

Undergraduate Research- Supporting FAU's Quality Enhancement Program (QEP) *Distinction through Discovery* and the "undergraduate research and inquiry" strategic plan platform, the Business and Economics Polling Initiative provides students with valuable opportunities to enhance their educational experience by designing and carrying out public opinion research. Specifically, students learn "hands on" every aspect of the survey research process from learning how to write a questionnaire to analyze data in SPSS and write up reports.

In addition, one of the goals of the Initiative is to take students to present their research findings at the Florida Undergraduate Research Conference (FURC) and the National Conference of Undergraduate Research (NCUR). Below are the numbers of students from the Business and Economics Polling Initiative (BEPI) that have attended the conferences since 2016.

Participants at the Florida Undergraduate Research Conference							
Number of students	2016	2017	2018	2019			
Students from other FAU programs	8	32	10	31			
Students from BEPI	6	8	16	21			
TOTAL students from FAU	14	40	26	52			
Total students participating in the conference	684	330	375	600			

Participants at the National Conference of Undergraduate Research						
Number of students	2017	2018	2019			
Students from other FAU programs	7	10	2			
Students from BEPI	7	14	20			
TOTAL students from FAU	14	24	22			
Total students participating in the conference	4,000	4,211	4,200			

Initiative Strengths and Opportunities

- The Initiative has become the "Gallup Poll" of Florida in terms of public opinion research. We have become the leader in polling that the media and the community see as the go-to source for measuring public opinion in Florida and beyond
- Faculty from other departments are interested in collaborating with the Initiative to conduct public opinion research.
- Students are eager to learn about Public Opinion Research and they work hard on their research projects in order to present their findings at conferences.

Initiative Weaknesses and Threats

• Limited funding is a threat to the growth of the program.

Initiative Resource Analysis

This year the program faced a budget cut and the future is uncertain for the program.

Initiative Future Direction

Unless there are more budget cuts to the program, I don't foresee any changes to the program.

Appendix 6. Center for Economic Education

Center Mission and Purpose

Every student that graduates high school should have a working knowledge of personal finance, the economy, and their role in it. Because economics and financial literacy is often not taught at home, students rely on schools for this important life information. However, many teachers do not have a deep background in economics or financial literacy themselves.

The mission of the FAU Center for Economic Education is to help with this problem by providing area educators access to new and innovative ways to teach personal finance and economics in the K-12 classroom. The FAU Center for Economic Education does this in three ways:

- Workshops. The center provides training in various economic and financial literacy topics by conducting training workshops for teachers in its service area school districts (Broward, Palm Beach, Martin, St. Lucie, Indian River and Okeechobee Counties).
- 2. Materials. The center's personnel develop teaching materials in economic education and financial literacy.
- 3. Research. The center's personnel conducts research into the effectiveness of economic education materials, programs, and techniques.

The FAU Center for Economic Education was established in 1975 and is an official state-recognized center.

Workshops:

The center had a successful 2019-2020 program year, despite the effective end of in-person workshops in March. Nonetheless, the total number of teachers reached was close to 500 (including non-Florida teachers). In total, the center conducted or participated in 26 events. The estimated total of students reached in 2019-20 was 39,000. The center's main point of contact is the teacher so FAU uses estimates of how many students are impacted by each workshop. We estimate 80 students are taught new materials or information for every high or middle school teacher trained and 35 students for each elementary school teacher trained. Table 1 shows the number of events held over the past five years.

Table 1: Annual Summaries

Academic Year	Events	Teachers	Total Hours
2019-20	26	494*	71
2018-19	23	437	83
2017-18	21	484	59
2016-17	24	372	56
2015-16	14	315	59
Totals since 2005	204	3928	753
Average Last Five Years	22	420	66

• 358 Florida teachers, 136 out-of-state teachers

A couple of the more well-attended programs were:

Ft. Lauderdale Walkabout – This special evening started at the Stranahan House in Ft. Lauderdale. Teachers learned about the economic history of Ft. Lauderdale while touring the house and then doing a walking tour.

Economics of Sea Level Rise – The FAU Center for Economic Education and the FAU Center for Environmental Studies teamed up to offer this teacher professional development event. Through the kind generosity of FPL, the event was held at the Manatee Lagoon. The event was held in conjunction with Colin Polsky, Director of the FAU Center for Environmental Studies.

Materials:

The FAU Center develops materials for a number of audiences. Below lists the teaching materials produced by FAU Center Personnel:

- COVID Economics Module, Council for Economic Education, forthcoming
- Saving the World with Economic Ideas, collaboration with St. Louis Federal Reserve Bank, 2019, William Bosshardt, Brett Burkey, 2019.
 https://www.stlouisfed.org/education/saving-the-environment-with-economic-ideas
- Behavioral Economic Module, Council for Economic Education, 2016, William Bosshardt, project director, writer (http://www.econedlink.org/topics/14)

- Election Economics Module, Council for Economic Education, 2016 (updated), William Bosshardt, project director, Brett Burkey, writer (http://www.econedlink.org/topics/6)
- High School Economics, Council for Economic Education, 2014, William Bosshardt, project director, Brett Burkey, writer.
 (http://store.councilforeconed.org/products/high-school-economics-3rd-edition)
- National Standards for Financial Literacy, Council for Economic Education, 2013, William Bosshardt, project director. (http://councilforeconed.org/resource/national-standards-for-financial-literacy/)

Center Faculty and Staff

William Bosshardt is the Director of the FAU Center for Economic Education. (White male) Lorraine Gallerani serves as administrative assistant. (White female)

The Center works in conjunction with the Florida Council on Economic Education. The FCEE's education specialist, Brett Burkey, works extensively with the Center. (White male)

Center Strengths and Weaknesses

In terms of weaknesses, the FAU center has lost some personnel over the last two years. One master teacher who was an integral part of the team took a job with the St. Louis Federal Reserve Bank as an education specialist. (St. Louis has the best economic education program in Federal Reserve System.) Brett Burkey was the assistant director until May, when he took a position at the Florida Council on Economic Education (FCEE). The Center will need to recruit new master teachers in the coming year.

In terms of strengths, the center has excellent relations with the school districts. The center continues to partner with the districts in workshop offerings. In addition, the center works with our national organization, the Council for Economic Education, based in New York. The center is acknowledged as an active center in the national network. The center won Center of the Year award in 2011. The director won the National Association of Economic Educator's Service Award in 2014 and the Multiplier Award (for mentorship) in 2017.

Center Goals and Future Direction

The pandemic has hampered efforts this year. The center continues to off online workshops, although participation has been less than hoped. Nonetheless, the center will strive to meet the following goals.

- Offer online workshops for FAU area teachers.
- Participate in national workshops presented by CEE.

- Develop new master teachers for future in-person workshops.
- Increase the board member size for the calendar year 2021, when the FAU Center will move back to in-person workshops.
- Support the efforts of Next Gen Personal Finance to reach local area teachers.

Overall, the FAU Center for Economic Education provides extensive community service for the local area schools. The center workshops are a part of the Broward County School's workshop schedule. The center also coordinates with the financial literacy specialist at Palm Beach County Schools.

Appendix 7. The South Florida Business and Economics Research Initiative

The South Florida Business and Economics Research Initiative is a College of Business initiative for conducting research with a focus on the three counties in the Miami metro area (Broward, Miami-Dade, and Palm Beach counties). Functions of this initiative include, among others, the collection and monitoring of data on key national, state, and local economic indicators (currently there are 35-40 indicators in the database), analysis of current economic conditions and important industries in the local economy, and the outlook for the local economy. The initiative is staffed by a Director (Neela Manage, Associate Professor of Economics) and a part-time graduate assistant who assists with data related functions. The Director of the initiative is a member of the Florida Council of Business Economists and regularly reports quarterly information about the South Florida economy compiled through this initiative to the Florida Chamber Foundation.

Initiative Goal

The long-term goal of the South Florida Business and Economics Research Initiative is to develop and advance it to a full-fledged center for economic research and forecasting, one that is consistent with the state of Florida guidelines and requirements for research centers.

Appendix 8. Dr. Will Luther's Outreach Activities 2015-Present

Opinion-Editorials

- Filling Fed Vacancies Would Leave Biden with Few Options to Replace Powell. American Institute for Economic Research, November 18, 2020. https://www.aier.org/article/filling-fed-vacancies-would-leave-biden-with-few-options-to-replace-powell/
- 2. Average Inflation Targeting and Expectations. American Institute for Economic Research, September 6, 2020. https://www.aier.org/article/average-inflation-targeting-and-expectations/.
- 3. The Myth of the Crowding-Out Myth. American Institute for Economic Research, September 4, 2020. https://www.aier.org/article/the-myth-of-the-crowding-out-myth/. (w/ Nicolas Cachanosky)
- 4. Where Have All the Coins Gone? Alt-M, July 10, 2020. https://www.alt-m.org/2020/07/10/where-have-all-the-coins-gone/.
- 5. How the Federal Reserve Literally Makes Money. The Conversation, June 10, 2020. https://theconversation.com/how-the-federal-reserve-literally-makes-money-140305.
- Negative Interest Rates Explained. American Institute for Economic Research, June 9, 2020. https://www.aier.org/article/negative-interest-rates-explained/. (w/ James L. Caton and Peter C. Earl)
- 7. The Recovery Has Begun, Ahead of Schedule. American Institute for Economic Research, June 5, 2020. https://www.aier.org/article/u-s-output-could-recover-90-or-more-by-the-end-of-august/.
- 8. State-level Stay-at-home Orders and the Willingness to Stay Home. American Institute for Economic Research, May 17, 2020. https://www.aier.org/article/stay-at-home-orders-and-the-willingness-to-stay-home/.
- 9. Even in a Crises, Student Loan Forgiveness is Bad Policy. American Institute for Economic Research, May 15, 2020. https://www.aier.org/article/even-in-a-crisis-student-loan-forgiveness-is-bad-policy/.
- 10. Soaring Unemployment Benefits Will Delay Recovery. American Institute for Economic Research, April 17, 2020. https://www.aier.org/article/exploding-unemployment-benefits-will-delay-recovery/.
- 11. More Sensational Reporting on COVID-19 Estimates American Institute for Economic Research, March 27, 2020. https://www.aier.org/article/more-sensational-reporting-on-covid-19-estimates/.
- 12. Good Reasons to Doubt the Estimate of COVID-19 Deaths. American Institute for Economic Research, March 18, 2020. https://www.aier.org/article/good-reasons-to-doubt-the-estimate-of-covid-19-deaths/.

- 13. Why Is Maduro Pushing the Petro? American Institute for Economic Research, February 20, 2020. https://www.aier.org/article/why-is-maduro-pushing-the-petro/.
- 14. Winner, Winner Chicken Dinner. American Institute for Economic Research, January 16, 2020. https://www.aier.org/article/winner-winner-chicken-dinner/.
- 15. The Effect of Data Lags on Monetary Policy. American Institute for Economic Research, January 14, 2020. https://www.aier.org/article/the-effect-of-data-lags-on-monetary-policy/.
- 16. What Arthur Burns Broke, Paul Volcker Fixed. American Institute for Economic Research, December 15, 2019. https://www.aier.org/article/what-arthur-burns-bork-paul-volcker-fixed/.
- 17. The Ideal Money is Global. American Institute for Economic Research, November 6, 2019. https://www.aier.org/article/the-ideal-money-is-global/.
- 18. What's the Right Inflation Rate? American Institute for Economic Research, September 5, 2019. https://www.aier.org/article/sound-money-project/whats-right-inflation-rate.
- 19. Judy Shelton and the Dual Mandate Debate. American Institute for Economic Research, August 23, 2019. https://www.aier.org/article/sound-money-project/judy-shelton-and-dual-mandate-debate. (w/ Scott Burns)
- Krugman and the Goldbugs. American Institute for Economic Research, August 23, 2019. https://www.aier.org/article/sound-money-project/krugman-and-goldbugs. (w/ Nicolas Cachanosky)
- 21. Student Loan Forgiveness Is Bad Policy. American Institute for Economic Research, June 27, 2019. https://www.aier.org/article/sound-money-project/student-loan-forgiveness-bad-policy.
- 22. Bernie Sanders's Messed Up Idea of Requiring Employee Ownership. American Institute for Economic Research, June 14, 2019. https://www.aier.org/article/bernie-sanderss-messed-idea-requiring-employee-ownership.
- 23. Did Tight Monetary Policy Result in a Sluggish Recovery? American Institute for Economic Research, May 15, 2019. https://www.aier.org/article/sound-money-project/did-tight-monetary-policy-result-sluggish-recovery.
- 24. Stephen Moore, Herman Cain, and the Myth of Independence. American Institute for Economic Research, April 11, 2019. https://www.aier.org/article/sound-money-project/stephen-moore-herman-cain-and-myth-independence.
- 25. What Makes Stephen Moore Unqualified? American Institute for Economic Research, March 29, 2019. https://aier.org/article/sound-money-project/what-makes-stephen-moore-unqualified.
- 26. The Trouble With Stephen Moore. American Institute for Economic Research, March 25, 2019. https://www.aier.org/article/sound-money-project/trouble-stephen-moore.
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