

FINANCE PROGRAM REVIEW

Department of Finance College of Business Florida Atlantic University

Self-Study Report

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A. Mission and Purpose of the Program

Mission Statement

The Department of Finance contributes to the mission of Florida Atlantic University by preparing students to embark in careers in Finance and related industries. The Department considers an integral part of its mission the production of scholarly research, and the involvement of its faculty in providing service to the College, the University and the community in the South Florida area. The Finance Department offers a Bachelor of Business Administration (B.B.A. and B.S.) a Master of Science in Finance, and a PhD in Business Administration with Finance concentration. In addition, we offer undergraduate minors in Finance and real estate, and risk and insurance certificates.

Department's Purpose in the Context of the BOG and FAU Mission and Strategic Plans

The Department of Finance as part of the College of Business makes significant contributions to the broader mission and goals of FAU. The Finance Department with its presence in both, Palm Beach and Broward counties, provides high-quality educational opportunities to serve the needs of local and international students in the South Florida area.

The Finance Program mission is aligned with the Florida Atlantic University Strategic Plan for the Race to Excellence (2015-2025) including the following:

The University's *aspiration* to recruit and retain the highest talent in faculty. Our faculty curriculum vitae, provided in this <u>link</u> provided. In recent years, the Department has hired outstanding faculty with very strong national reputations.

The University's *goal* of boldness, that is, a uniquely competitive and globalized student body. The Finance Program (CIP 52.0801) is listed as on the State University System of Florida Programs of Strategic Emphasis under the "Gap" category. This category is intended to identify areas in need of greater degrees to fill the gap between current and projected state job demand.

The University's *goal* of strategy, that is, wise and innovative allocation of resources. The Department of Finance recently revised the curriculum and reopened an MS in Finance degree as a "market rate" program.

B. Last Program Review

Strategic Goals and Action Plans

In 2014, the department went through a comprehensive program review. The reviewers offered a broad range of recommendations which were reviewed and considered. The following is a list of Strategic Goals (in bold) and Action Plans (in regular font) that were developed based on the review team's recommendations. The Actions taken since the last review pertaining to each Goal and Plan are provided.

Goal 1: To enhance the quality and currency of the undergraduate Finance curriculum. The following action plans should be implemented. First, a thorough review and revision of the curriculum for undergraduate Finance majors should be conducted. The last time a full review took place was in 2004. In addition, Assurance of Learning (AoL) outcomes, required for accreditation, for each course should be reviewed and updated. Second, the faculty should examine the course requirements for the Financial Services Track. In its present form, the track requires only six credit hours in Finance courses beyond the basic core course (FIN3403). This means that students can graduate with a major in Finance by taking only 9 credits in Finance courses, whereas our traditional track requires 15 credit hours beyond the core course. The Financial Service Track should be re-designed to be a more rigorous alternative to the existing traditional track.

Action: A full curriculum review for the program was conducted in 2015 by the Department of Finance Curriculum Committee. Two major changes were voted on by the full Finance Department faculty and approved. The following changes were implemented:

The Financial Services Concentration was eliminated.

The list for the Finance major electives was revised. The list of the "choose one" electives was augmented with the addition of the Corporate Risk Management (RMI4353) and Insurance and Financial Planning (RMI416), and Risk Management and Insurance (RMI3011) were removed from the list. All RMI courses are still to be offered, supporting the Insurance (RMI) Certificate and the general elective option for the College of Business.

All the learning outcomes for the various courses were found to be appropriate.

Goal 2: To use the recently redesigned Trading Room to brand the Finance program and to create an "experiential learning" course for undergraduate students. The action plan involves the development of a "Student Managed Fund" course (Appendix A: Assessment Plan -- 2018-2019). This course is offered by a number of Finance departments in top tier academic institutions throughout the country. This would be a strong vehicle for branding FAU's Finance Department by attracting better students and increasing the visibility of our undergraduate Finance degree. The course would be designed to strengthen the skills and abilities of students to conduct market analysis and portfolio management. Most importantly, an investment fund would need to be created from donations made by companies and individuals with interests in Finance. Financial industry professionals would

be invited guest lecturers providing students with more opportunities to interact with executives. These interactions, in turn, will help the College build new relationships with the financial industry in the South Florida area.

Action: A 3 - credit course (FIN4934) with the special topics designation of Student Managed Fund, has been offered in the trading room in the spring of 2016, 2017 and 2018. The course is taught by an adjunct faculty member who manages a hedge fund in the local area. The course provides opportunities for students to gain practical insights into the professional management of investment portfolios. Students who enroll in the course can get Bloomberg Certification during the term. We still have not had funding from either internal or external sources.

Goal 3: To strengthen the PhD curriculum by including courses offered by faculty in the Economics Department. To improve the quality of the PhD program curriculum, the following actions plans are proposed. First, a second econometrics methodology course will be added. The new course will increase the depth of knowledge about advanced tools and techniques used in empirical research. Second, the faculty will consider other possible Economics courses for the doctoral curriculum and take advantage of the depth of theoretical knowledge among the Economics faculty. Both of these actions will enhance the training of our doctoral students and increase their opportunity for career placement in high quality institutions of higher learning.

Action: The Ph.D. curriculum now includes two additional econometric courses, for a total of four: Regression Analysis, Time Series, Panel Data Analysis (offered with Economics) and Financial Econometrics. We have also increased a quantitative component of the program by requiring students to take 6000 level Quantitative MS in Finance course or 6000 level statistics course.

Goal 4: To grow the number of Finance majors on the Davie campus. Finance is an area that attracts talented students and in which it is difficult to acquire highly qualified faculty that is faculty salaries in this area are very high. For this reason, it is more difficult for institutions to compete with FAU in Finance compared to some other business disciplines. Enrollments in Finance in Davie have been steady. However, this is an area of important competitive advantage for FAU. The action plan is to ensure that sufficient faculty in Davie are maintained to ensure growth in Finance (Appendix B). Currently the program is staffed by a combination of tenure track faculty and doctoral students. In addition, going forward it will be important to find clinical faculty to teach Finance courses. Moreover, courses should be taught by an appropriate combination of faculty as needed to maintain AACSB accreditation.

Action: The table below shows the enrollments for all the Finance courses offered on the Davie campus, Lecture-Capture Video Streaming, and the Online BBA by academic year for which data were available. The Finance courses include those required of all business majors as well as those specific to students majoring in Finance.

In an effort to address this goal, the Department increased the number of course offerings on the Davie campus after the program review. In addition, the College hired a Manager of Instructional Resources with oversight of course scheduling to ensure sufficient course offerings on optimum days and times on all campuses. The trends indicate that the overall number of Finance enrollments increased over the period in Davie, however there was a precipitous drop over the past academic year.

Upon further investigation, we noted that a very popular instructor who routinely had enrollments of approximately 130 students in her large sections went on maternity leave during the last academic year. The enrollments of the faculty member who covered her sections were approximately 40 students.

Enrollment in Finance Courses

	DAVIE - UNDERGRADUATE	LCVS	OBBA
2014-15	659	652	208
2015-16	667	1097	120
2016-17	738	1033	200
2017-18	560	1047	338

Another contributing factor includes the increase of enrollments in the Finance courses in the Online BBA. Also, over the past academic year, the Manager of Instructional Resources has increased the number of Finance sections on the Boca campus because Boca sections demonstrated a clear pattern of filling to capacity. It is possible that prior to this adjustment, students were traveling more often to Davie because they could not obtain seats in Boca sections; the effect of adding sections in Boca may have contributed to a downturn in Davie enrollments.

Lastly, the LCVS sections of the required Finance course for all business majors may also have affected Davie enrollments, however the difference in the last two academic years is not that significant.

Other Major Changes Made Since Last Review

The Department has made important hires this year and in the past recent years. These faculty hires have made a significant improvement in the research profile of the Department. The reputation of these faculty will hopefully have a similarly significant impact on the number of applications from individuals seeking a Ph.D. in the Finance concentration. We expect the number of these applications and the capacity of the faculty to work with more students to favorably impact the number of Ph.D. graduates in the College of Business over time.

C. Instruction

Baccalaureate Program

Goals for Student Learning: B.B.A/B.S. Program Assessment-Finance

Faculty of the Finance Department established learning outcomes for each of the Finance courses we offer. Our assessment plan is designed to measure student achievement in key Finance courses with regard to learning outcomes defined by the State of Florida Academic Learning Compacts or SLOA. These include content knowledge (declarative, research skills, and technical skills), critical thinking (analytical skills, and practical skills) and communication (oral and verbal). Our assessment plan for our Bachelor program is included in **Appendix A: Assessment Plan -- 2018-2019**.

Use of Assessment Results for Program Improvement

The Department of Finance uses the results from their assessment process to make changes that include course revisions, pedagogical adjustments, and curriculum changes. In addition, we periodically update our assessment plan. Results from the most recent assessment are found in **Appendix A: Assessment Plan -- 2018-2019.**

Curriculum

Lower-Level Prerequisites:

The Finance Department is in compliance with the State-approved lower- level prerequisite courses which include the following:

College Writing 1	ENC1101
College Writing 2	ENC1102
Financial Accounting	ACG2021
Managerial Accounting	ACG2071
Macroeconomics	ECO2013
Microeconomics	ECO2023
Methods of Calculus	MAC2233
Introductory Statistics	STA2023
Information System Fundamentals	ISM2000

Admission Criteria

The Bachelor's in Business Administration (BBA/BS) in Finance is a 4-year program requiring a minimum of 120 credit hours. Students must complete the foreign language admission requirement, Intellectual Foundations Program (IFP) requirement, the 11 College of Business lower-level pre-requisite courses listed above with a 2.5 GPA and minimum

grade of C, and have earned 60 credits before they can declare their College major in Finance.

College of Business Core Courses

Business Law	BUL4421
Introduction to Business Communication	GEB3213
Introduction to Management and Organizational	MAN3025
Behavior	
Global Strategy and Policy	MAN4720
Management Information Systems	ISM3011
Marketing Management	MAR3023
Principles of Financial Management	FIN3403
Operations Management	MAN3506
Quantitative Methods in Administration	QMB3600

Finance Major Courses

Advanced Managerial Finance	FIN4424
International Financial Management	FIN4604
Financial Institution	FIN4303
Investment Analysis	FIN4504
Cases in Financial Management	FIN4422

Plus **one** Finance major elective:

Corporate Risk Management	RMI4353
Financial Management of Institutions	FIN4313
Financial Derivatives	FIN4533
Real Estate Finance	REE4204
Real Estate Finance Real Estate Investments	REE4204 REE4303

Comparison of FAU Finance Program to Peer/Aspirant Institutions

Major Requirements Comparison:

Comparisons of FAU Finance program to other peer/competitive institutions like Kennesaw State (Kennesaw/KS), University of Alabama (UAB) and University of Texas at San Antonio (UTSA) reveal some significant differences in required courses, available concentrations/ specialization tracks, and the variety of Finance elective courses offered by these programs.

In terms of required Finance courses, all four programs require a Principles of Financial Management (FIN3403) type core business school course. All peers require an Investment Analysis course similar to FIN4504 as part of the major degree requirement. FAU requires FIN4604, while Kennesaw offers an option of International Financial Management (FIN4420), Economic Development of International Trade (ECON4310), or International Trade and Finance (ECON4410). Neither UAB nor UTSA require International Financial Management as a major course, but UTSA offers a 4000-level International Finance elective. UAB does not offer International Finance as a major or elective course.

FAU and UTSA require a 4000 level Cases in Finance as a major requirement. Neither UAB nor Kennesaw offer a Cases course as a major or elective requirement. Furthermore, FAU requires FIN 4303, UAB requires a similar but broader, lower level (300) course in Institutions and Markets.

Kennesaw, UTSA and UAB all offer an Intermediate Corporate Finance or Intermediate Financial Management course as part of the Finance major. FAU requires Advanced Managerial Finance (FIN4424). In addition, UTSA and UAB also require a Money and Banking course. While Kennesaw and FAU do not have this requirement.

Finally, UTSA requires Computer Modeling of Financial Applications (FIN4873) and UAB has a pre-major requirement to complete Financial Analysis & Modeling (FIN389).

Please refer to Appendix B: Peer/Aspirant Schools Finance Course Requirements for a full list of major course requirements of these schools.

Elective Requirements Comparisons:

Peer programs offer and require a wider array of Finance elective courses to their majors. FAU requires one elective and offers three Finance choices: Financial Management of Institutions, Financial Derivatives, or Special Topics.

Kennesaw requires 5 electives. Four electives are selected from nine Finance courses: Short Term Financial Management, Fixed Income Securities, Directed Study, Financial Statement Analysis, Special Topics in Finance, Financial Derivatives and Financial Engineering, Behavioral Finance, Financial Management of Financial Institutions and Advanced Corporate Finance. The fifth elective comes from the Economics department.

UAB requires a concentration or a double major or approved minor, with credits ranging from 9-18 depending on choice. The Financial Engineering concentration requires five quantitative courses with a mix of Statistics, Finance, Math and Economics. The Banking and Financial Services concentration requires 3 courses and includes two Finance courses: Fundamentals of Risk Management & Insurance and Bank Administration. The Value Investing concentration requires 3 courses and includes two Finance courses: Value Investing Principles and Advanced Value Investing.

UTSA offers an option of Corporate Finance/Investment banking track, Investment Management Track and Financial Institutions Track. Finance majors at UTSA choose 3 electives from a list that includes: Debt Markets, Derivative Markets, Business Finance for Entrepreneurs, Introduction to Risk Management, Introduction to International Finance, Independent Study, Internship in Finance, Security Analysis, Investment Portfolio Management, Introduction to International Finance, Credit Analysis, Financial Institutions Management, Property-Liability Insurance Finance and Life and Health Insurance Finance.

Comparisons of FAU Finance Program to Aspirant Schools:

In terms of aspirant schools, we compared the Finance program at FAU to programs offered by Georgia State University (GSU), Texas Tech University (TTU), and University of South Florida (USF).

The Finance major at GSU requires two prerequisites (Fundamentals of Valuation FIN400, 6 credits, and Financial Analysis and Introduction to Loan Structuring, case based, FIN4020) and three Finance 4000 level elective courses. GSU also offers FIN3300 (equivalent to FIN3403 at FAU), which is a core course for all Business majors. FIN3300/FIN3403 is taken early in the program, and students may not retain the concepts for later on when they are used in advanced Finance courses. Thus, GSU has two layers of prerequisites - FIN3300 and FIN4000 for its students majoring in Finance. FIN4000 is particularly useful as it reviews the concepts of valuation and portfolio theories before the students take any other higher-level Finance course.

GSU offers a wider variety of elective courses for majors in Finance. A Finance major student can also select his/her courses in a way to specialize in *Corporate Finance* or *Investment* or *Financial Institutions* track. Each elective course at GSU covers a narrow range of topics but provides more depth. In other words, the course design stresses specialization rather than providing students a broader overview of many topics.

GSU offers a theory course in Advanced Corporate Finance (FIN4300) and another course in Financial Modeling (FIN4080).

The Finance major at Texas Tech University (TTU) requires FIN3320 (analogous to FAU's FIN3403) as a core requirement and the following 7 required Finance major courses: Financial Statement Analysis, Corporate Finance I and II, Financial Markets and Institutions, Investments, Real Estate Fundamentals and Financial Modeling. Students also select three electives: Personal Financial Management, Real Estate Finance, Student Managed Investment Fund, or any 3000-4000 level business course. TTU does not require an International Finance or Cases in Finance course.

In summary, the conclusions from the comparison of bachelor's degree programs in Finance for peer/competitive and aspirant schools to FAU bachelor program are:

1) Except for FAU, most programs reviewed require an intermediate Finance course in addition to the core course. Our program offers an Excel-based course on the Fundamentals Principles of Finance.

- 2) There are considerable differences in the Finance areas that each program requires of their Finance majors.
- 3) Compared to our Finance program, all schools reviewed offer a wider array of Finance elective courses to their majors. In contrast, our program requires courses that are broader in scope than the programs reviewed, and fewer Finance electives.
- 4) GSU, UTSA, UAB, and USF offer concentrations or specialized tracks for students to choose electives from whereas FAU, Kennesaw, and TTU do not.

Real Estate Minor

The Real Estate minor is designed for Business majors. Because part of the requirements include successful completion of the Business Core courses, the minor is usually not practical for General Economics or Health Administration majors. The Real Estate Minor requires the following three courses with a grade of "C" or better:

Required Courses (9 credits)

Principles of Real Estate	REE3043
Real Estate Finance	REE4204
Real Estate Investment	REE4303

A maximum of 3 credits used for the Real Estate Minor may count toward other Business major requirements. A minimum of two courses (6 credits) must be exclusive to the minor. A minimum of 6 credits must be taken in residence at FAU. The acknowledgment of the minor is official upon successful completion of a College of Business degree program.

Risk Management and Insurance Certificate

The Risk Management and Insurance certificate provides students with an overall background in risk management and insurance. The certificate requires the following three courses with a grade of "C" or better.

Required Courses (9 credits)

Risk Management and Insurance	RMI3011
Insurance and Financial Planning	RMI4116
Corporate Risk Management	RMI4353

Internships, Practicums, Study Abroad, Field Experiences

The Department of Finance does not have a formal internship program. Our majors are strongly encouraged to seek opportunities for meaningful internships prior to graduation. We do not offer credits in lieu of internship activities.

Pedagogy

The Finance Department recognizes the importance of pedagogy as a critical determinant to the efficacy and quality of instruction. For years we have used the McGraw-Hill CONNECT with Learn Smart online system in a number of our undergraduate courses. This system is required for all of the basic Principles of Finance sections. The system is also used in our Investment courses.

In addition, we introduced a course entitled "Student Managed Fund" offered in our trading room. This is practical course which allows students to understand the foundations of building and managing investment portfolios.

Lecture Capture Video Streaming (LCVS) Delivery. In this course delivery mode, lectures are transmitted live and recorded. Students choose to watch synchronously or asynchronously at a later time. Due to the large number of students in the lecture capture sections, teaching assistants provide support for the faculty of record by responding to student e-mails and are available for tutoring.

Online Delivery. Prior to the pandemic, faculty who teach online were required to complete training offered by the University's Center for eLearning. **eDesign** certifications ensured that faculty met national standards, and a number of faculty have obtained **Quality Matters** certifications for the specific courses they teach.

Since the pandemic, the University has mandated that those faculty who previously had no certifications from the Center for eLearning, had to enroll in "boot camp" training sessions prior to teaching online courses in the summer 2020 semesters. All faculty in the Finance Department have now been formally trained to teaching online courses.

Scope of Institutional Contributions to Programs Outside of Finance

We offer no lower division courses and we do not contribute to the Intellectual Foundations Program. We offer a certificate of risk management and insurance to our students.

Table 1 below provides a breakdown of the Department's contribution to enrollments. State Fundable Student Credit Hours (SCH) and Full Time Equivalents (FTE) are those for which the University receives funding from the State. Fundable SCHs and FTEs are those credit hours in which revenue is generated by students who pay full price from their own funds (or finance aid) in a Florida State University System program that the state tax dollars directly support.

Non-State Fundable SCHs and FTEs are those that have no State funding of support. These include credit hour revenues generated by market rate programs. They also include other non-state funded credit hours such as those for teaching assistants/research assistants, athletes, non-residents, employees, 60+ year old students, Department of Children and Families students, children of deceased first responders, and so on.

Table 1 shows that for the 2018-19 academic year, 49.1% of the Annualized State-Fundable FTEs were generated by majors within the Department of Finance. In that same year, 47.2% of the FTEs were generated by majors outside the Department due primarily to the

Principles of Financial Management (FIN3403) course required of all Business majors. Similarly, the graduate FTEs generated by students outside the Department are due to the Finance course required of all MBA students.

Table 1: Annualized State-Funded FTE Produced In/Out of Department of College

FTE produced b	y students who are:	2015- 2016	2016- 2017	2017- 2018	2018- 2019
	Majors within the				
	department	112.9	136.5	188.6	191.9
Upper Division	Majors outside the				
Undergraduate	department, but				
Chacigiaduate	within the college	132.2	139.7	198.9	184.6
	Majors outside the				
	college	10.8	13.6	15.4	14
	Total	255.8	289.8	402.9	390.5
	Majors within the				
	department	0	0.1	0.1	0
	Majors outside the				
Graduate	department, but				
Graduate	within the college	21.7	17.5	28.4	24.2
	Majors outside the				
	college	0.5	0.4	0.3	0.6
	Total	22.2	18	28.8	24.8
	Majors within the				
	department	112.9	136.6	188.7	191.9
	Majors outside the				
Total	department, but				
Total	within the college	153.9	157.2	227.3	208.8
	Majors outside the				
	college	11.3	13.9	15.6	14.7
	Total	278	307.7	431.7	415.4

Enrollment Information

Annualized State-Fundable FTE for the undergraduate program grew by 34.5% from 2016-17 to 2018-19 academic year, as shown in Table 2 below. For the graduate programs, the growth rate over the same period was 37.8%.

Table 2: Annualized State-Fundable FTE Produced by Level – Finance

	2015-2016	2016-2017	2017-2018	2018-2019
Undergraduate Total (FTE)	255.8	289.7	402.9	390.5
Graduate Total (FTE)	22.2	18	28.8	24.8
Grad I	17.3	12.3	19.4	16.3
Grad II	4.9	5.7	9.4	8.6
Classroom	20.6	16.7	25.3	22
Thesis-Dissertation	1.6	1.3	3.5	2.8
Grand Total (FTE)	278	307.7	431.7	415.4

The tables 3 and 4 below presents State Fundable and State Non-Fundable Student Credit Hours and Annualized FTE by academic years.

TABLE 3: Upper Division Undergraduate - State Fundable and Non-State Fundable FTE

	State Fundable SCH	Non-State Fundable SCH	State Fundable FTE	Non- State Fundable FTE
2014-15	10,239	480	341	16.0
2015-16	10,233	399	341	13.3
2016-17	11,590	411	386	13.7
2017-18	12,087	306	403	10.2
2018-19	11,716	243	391	8.1
2019-20	11,558	324	385	10.8

TABLE 4: Total SCH and FTE (undergraduate and graduate)

AY	Total SCH	Total FTE
2014-15	12,730	441.79
2015-16	13,208	462.05
2016-17	14,883	519.83
2017-18	15,445	539.58
2018-19	14,988	525.48
2019-20	15,058	528.31

Note: Fulltime Equivalent (FTE) is a measure of instructional activity based on the number of student credit hours (SCH). Annualized FTE is based on the standard national definition and calculated as the undergraduate & graduate SCH divided by 30 and 24 respectively.

Headcount, FTE Production and Class Size

The table 5 below indicates a stable average class size for undergraduate and graduate courses.

TABLE 5: Average Class Size and Student/Faculty Ratios (Lecture/Course Size Taught by Faculty)

	2014-15	2015-16	2016-17	2017-18	2018-19
Undergraduate	44.5	49.1	49.9	50.9	48
Graduate	11.5	11.9	13	12.5	10.6
Total	56	61	62.9	63.4	58.6

Source: IEA Dashboard Indicators

Faculty to student ratios have risen for undergraduate and graduate Finance classes, as seen in Table 6.

TABLE 6: Student-Faculty Ratio
Annualized Student FTE Produced Per Faculty Instructional Person-Year

	2014-15	2015-16	2016-17	2017-18	2018-19
Undergraduate	45.3	43.8	47.7	73.7	68.2
Graduate	5.3	3.8	3	5.3	4.3
Total	50.6	47.6	50.7	79	72.5

Source: IEA Dashboard Indicators

Finance Majors

Table 7 shows the number of Finance majors over the 2016-17 to 2018-19 periods. During this period, the number of Finance majors has grown by 3.35%.

TABLE 7: Majors Enrolled by Level (Annual Headcount)

Finance (Program CIP: 520801)							
2015-16 2016-17 2017-18 2018-19							
Bachelors	606	716	675	740			
Total	606	716	675	740			

Table 8 shows the number of first and second minors by academic year going back to 2014-2015. The number of Finance minors have remained steady over the past four academic years.

TABLE 8: First and Second Minors by Academic Year

ACADEMIC YEAR	FINANCE	REAL ESTATE
2014-15	54	25
2015-16	45	29
2016-17	37	43
2017-18	37	41
2018-19	31	44
2019-20	28	43

Quality of Instruction

Quality of instruction is assessed using the Student Perception of Teach (SPOT), which is a survey administered near the end of each class. Table 9 shows the average rating of overall teaching effectiveness, which is collected by question 6 of the SPOT survey. The SPOT survey uses a 5-point scale with 1 being excellent and 5 being poor. From left to right, first three columns of numbers refer to Finance, the second three columns to the College of Business, and the last three to the University in total. SPOT evaluations for Finance courses at both, the undergraduate and graduate levels, are less favorable in comparison to the College and the University. Given the quantitative nature of the Finance discipline, and the mix of non-Finance majors enrolled in our courses, one should not draw conclusions about the quality of instruction of the Finance faculty based on this data, alone. Even though the averages for Finance are not as favorable compared to the College and University, the ratings for Finance are within a respectable range.

TABLE 9: Finance Rating Instructor's Overall Teaching Effectiveness

			Finance		College of Business			University		
Scale: 1 = Excellent, 5 = Poor		Summ er 18	Fall 2018	Spring 2019	Summ er 18	Fall 2018	Spring 2019	Summ er 18	Fall 2018	Spring 2019
Undergra	# Sections	11	27	30	146	330	347	889	2643	2438
duate	Mean Rating	1.8	1.8	2	1.7	1.6	1.7	1.6	1.6	1.6
Graduate	# Sections	6	17	20	81	193	194	189	533	548
Graduate	Mean Rating	1.9	2.6	2	1.7	1.6	1.7	1.6	1.6	1.6
Total	# Sections	17	44	50	227	523	541	1078	3176	2986
Total	Mean Rating	1.8	2.1	2	1.7	1.6	1.7	1.6	1.6	1.6

Source: Question 6, Student Perception of Teaching Results, Summer 2018 to Spring 2019

Student Profile, Including Student Diversity and Demographics:

Table 10 and 11 below present the profile of the Finance students by race, ethnicity, and gender. Table 10 present number of students while Table 11 presents percentages of totals. Information is presented separately for Finance, for the College of Business, and for the University.

Based on the information in Table 10, we see that Finance majors are diverse group. They are more likely to be male than female, with a ratio of male/female of 2.36. For the College of Business and the University as a whole, the male/female ratios are 1.16 and 0.77 respectively.

TABLE 10: Majors Enrolled (Annual Headcount) By Race, Ethnicity and Gender Finance (Program CIP: 520801) Undergraduate Program

	Academic Year 2018-19							
		Finance	College of Business	University				
Amariaan Indian/	Female	1	31	109				
American Indian/ Alaskan Native	Male	1	23	84				
Alaskali Native	Total	2	54	193				
Asian or Pacific	Female	17	203	872				
Asian of Pacific Islander	Male	25	219	718				
Islander	Total	42	422	1590				
	Female	54	858	3897				
Black Non-Hispanic	Male	76	709	2438				
	Total	130	1567	6335				
	Female	67	1060	4537				
Hispanic	Male	138	1073	3192				
	Total	205	2133	7729				
	Female	68	1372	5913				
White Non-Hispanic	Male	259	2047	5258				
_	Total	327	3419	11171				
	Female	12	140	465				
Non-resident Alien	Male	19	201	521				
	Total	31	341	986				
	Female	1	37	129				
Not Reported	Male	2	33	103				
	Total	3	70	232				
	Female	220	3701	15922				
Total	Male	520	4305	12314				
	Total	740	8006	28236				

Table 11 below shows percentages by ethnic origin for Finance majors, College of Business students and FAU students. The three largest groups by ethnic origin in Finance majors are White Non-Hispanic with 44.19 % followed by Hispanic with 27.7 %, and Black Non-Hispanic with 17.57 %. The College of Business and the University show a similar distribution of race and ethnicity as Finance majors.

Table 11: Majors Enrolled by Race and Ethnicity, Percentages of Totals

(Percent)	Finance	College of Business	University
American Indian/Alaskan Native	0.27	0.67	0.68
Asian or Pacific Islander	5.67	5.27	5.63
Black Non-Hispanic	17.57	19.57	22.43
Hispanic	27.7	26.64	27.37
White Non-Hispanic	44.19	42.7	39.56
Non-resident Alien	4.19	4.26	3.49
Not Reported	0.4	0.87	0.82
Total	100	100	100

Advising Procedures

During their freshman and sophomore years, students are advised by the University Advising Services office. Students who list an interest in a specific Business major during their orientation and subsequent sessions with the University advisors are formally categorized as Pre-Business majors. Until they have completed 60 credits and successfully passed the required lower level nine Pre-Business foundation courses, the records of these Pre-Business majors show their major of interest as a concentration. The challenge for all departments in the College is to establish communication with students interested in their respective majors during the student's first two years at FAU. Pre-Business students are handed off from the University to the College's Student Academic Services office once they have completed 45 credits so that the advisors engages with students by the time they have completed the 60 credits. College advisors are able to provide direction on the appropriate courses to take to ensure timely graduation. Advisors sometimes refer students to the Department Chair for further guidance when appropriate. The Student Academic Services office provides advising to all undergraduate and graduate students in the College. Faculty do not have formal responsibility for advising students, although any number of faculty do provide guidance informally.

Retention Rates

Retention rate is the percentage of students that return each year. As shown in the following charts, the retention rates are separately reported for three types of students: First Time in College students (FTIC), Florida Transfer Students, and Other Transfer Students. The

retention rates which have remained relatively stable within the 4-year period (Fall 2015-Fall 2018), are showing slight declines in Fall 2019. Table 12 provides more detailed information with student count and degree type.

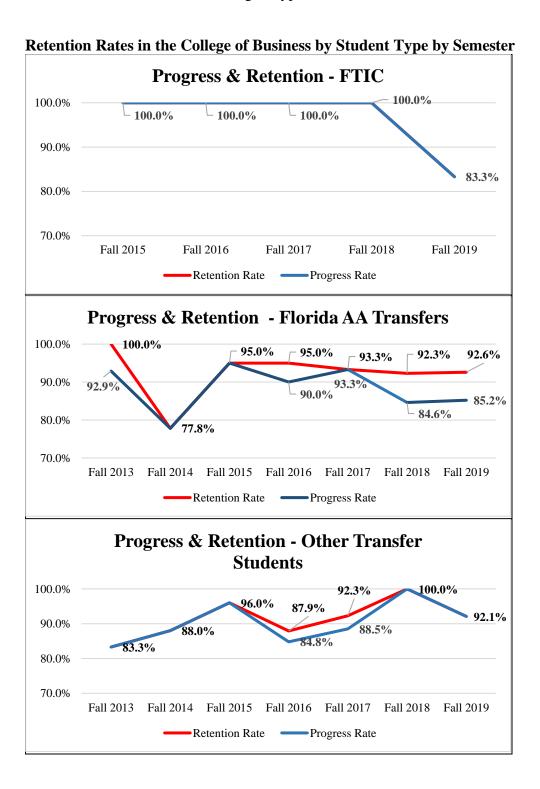


TABLE 12: Progress & Retention by Student Type and Degree

		First Time in	College	Florida AA Transfers			Other Transfer	Students	
					Fall 2013				
	n	Retention%	Progress%	n	Retention%	Progress%	n	Retention%	Progress%
BBA Finance				14	100.0%	92.9%	17	82.4%	82.4%
BS Finance							1	100.0%	100.0%
Total				14	100.0%	92.9%	18	83.3%	83.3%
					Fall 2014				
BBA Finance				9	77.8%	77.8%	24	87.5%	87.5%
BS Finance							1	100.0%	100.0%
Total				9	77.8%	77.8%	25	88.0%	88.0%
					Fall 2015				
BBA Finance	1	100.0%	100.0%	20	100.0%	100.0%	23	95.7%	95.7%
BS Finance				1	0%	0%	2	100.0%	100.0%
Total	1	100.0%	100.0%	20	95.0%	95.0%	25	96.0%	96.0%
					Fall 2016				
BBA Finance	6	100.0%	100.0%	20	95.0%	90.0%	31	87.1%	83.9%
BS Finance	1	100	100				2	100.0%	100.0%
Total	7	100.0%	100.0%	20	95.0%	90.0%	33	87.9%	84.8%
		-	_		Fall 2017	_		-	_
BBA Finance	3	100.0%	100.0%	28	92.9%	92.9%	25	92.0%	88.0%
BS Finance				2	100.0%	100.0%	1	100.0%	100.0%
Total	3	100.0%	100.0%	30	93.3%	93.3%	26	92.3%	88.5%
		_			Fall 2018			_	-
BBA Finance	7	100.0%	100.0%	26	92.30%	84.60%	22	100.00%	100.00%
BS Finance									
Total	7	100.0%	100.0%	26	92.3%	84.6%	22	100.0%	100.0%
					Fall 2019				
BBA Finance	5	80.0%	80.0%	26	92.30%	84.60%	36	91.7%	91.7%
BS Finance	1	100.0%	100.0%	1	100.0%	100.0%	2	100.0%	100.0%
Total	6	83.3%	83.3%	27	92.6%	85.2%	38	92.1%	92.1%

Graduation Rates

Table 13 shows the 4-year and 6-year graduation rates for BBA and BS Finance majors. The 4-year graduation rate has increased since the last program review in 2013-14.

TABLE 13: Graduation Rates (4 Year and 6 Year)

4	year graduation rat	BBA & BS (FIN)			
2012-13	2013-14	2014-15	2015-16	2016-17	
44.2%	50.0%	50.0%	59.5%	65.1%	
6	year-graduation rat	te (FTIC)	BBA & BS (FIN)		
2010-11	2011-12	2012-13	2013-14	2014-15	
7.8%	96.4%	92.3%	87.7%	90.9%	

Table 14 shows the number of degrees awarded to first and second BBA and BS majors.

TABLE 14: Degrees Awarded (BBA and BS) First & 2nd Majors

BBA	FIN-1st	FIN-2nd	TOTAL
Fall 2014	61	8	69
Spring 2015	70	6	76
Summer 2015	31	2	33
TOTAL 2014-2015	162	16	178
Fall 2015	63	5	68
Spring 2016	69	6	75
Summer 2016	42	2	44
TOTAL 2015-2016	174	13	187
Fall 2016	57	4	61
Spring 2017	92	6	98
Summer 2017	58	0	58
TOTAL 2016-2017	207	10	217
Fall 2017	67	2	69
Spring 2018	84	4	88
Summer 2018	54	2	56
TOTAL 2017-2018	205	8	213
Fall 2018	88	2	90
Spring 2019	106	4	110
Summer 2019	47	1	48
TOTAL 2018-2019	241	7	248
Fall 2019	75	2	77
Spring 2020	107	1	108
Summer 2020	59	1	60
TOTAL 2019-2020	241	4	245
TOTAL 2015-2020	1230	58	1288

Salary and employment information for 2015-16 is shown in Table 15. Out of 182 graduates, 118 were employed, 102 were employed full-time and earned \$49,748 per year, on average. Unfortunately, information on salaries was not available for more recent years.

TABLE 15: 2015-16 Salary Information Florida Public University Graduates, Finance, General (CIP 520801)

# of Graduates from FAU	182
# Employed	118
Full time (#) employed	102
FT Average Earnings/year	\$49,748
Quarter Earnings	\$12,437
Continuing education	10%
Full time or continuing education	66%

Student Recruitment

The Department of Finance does not have a student recruitment program for undergraduate students.

Graduate Programs

Master Science Finance Program

The 16-month Master of Science in Finance (MSF) program is specially designed to allow participants to continue their professional responsibilities while earning an AACSB-accredited Master of Science in Finance degree. With courses offered on Monday and Wednesday evenings, our full-service, all-inclusive program is specially designed for those with busy personal and professional commitments as well as for those who prefer the experience of a structured cohort program. The Master of Science in Finance program trains current and future professionals for productive careers in financial management, investment banking, and investment management.

The program includes Bloomberg Certification and preparation courses for the Chartered Financial Analyst® (CFA) designation.

The MSF program uses real-world applications and access to the top faculty in Finance, complementing studies in the classroom to create a real-world learning experience. Courses are designed to develop abilities in critical thinking, analysis, and problem solving. Future Finance professionals will learn how to be adept at interpreting continually changing events and circumstances within this booming industry.

Admissions Criteria

The College of Business seeks a diverse, highly qualified group of graduate students. Applications are evaluated on several factors emphasizing prior academic performance, GMAT or GRE scores, work experience, and the potential for scholarly and professional success.

- Bachelor's degree in any discipline; no business prerequisites are required, Finance-related degree preferred
- GPA over the last 60 undergraduate credits:
 - o Approximately 3.0 or higher from FAU
 - o Approximately 3.2 or higher from an AACSB-accredited institution
- Four years of Finance-related work experience preferred
- GMAT/GRE (see waiver information below)
- Non-native speakers of English must provide evidence of proficiency in English from the Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS).
- The minimum College of Business requirement for the TOEFL is 600 (Paper-Based Test) and 100 (Internet Based Test). The minimum College of Business requirement for IELTS is a band score of 7.0.
- GMAT/GRE waiver eligibility is based on evaluation of credentials listed under "Admissions Criteria." A waiver may also be granted with the completion of an advanced degree (Master's, Doctoral, Professional) from a regionally accredited university or institution. Students who are advised to re-apply to the program with a GMAT/GRE exam score are expected to obtain a GMAT total score of 500 or a GRE score of Verbal: 143, Quantitative: 144, Writing: 4.

Students start the program with a boot camp. The boot camp is designed to give students a refresher in Quantitative Methods, Finance, Accounting and Economics. The boot camp curriculum will cover materials from Financial Management (FIN 6406), Financial Accounting Concepts (ACG 6027) and Advanced Managerial Economics (ECP 6705). The boot camp is required, and a passing grade is required for each of the modules.

There are currently 44 active students enrolled in the program. Considering the accelerated pace of the program, this enrollment number has remained relatively constant over the past several enrollment periods. Table 16 shows the history of enrollments and State Fundable and Non-State Fundable Student Credit Hours (SCH) and Full Time Equivalents (FTE). State Fundable Student Credit Hours (SCH) and Full Time Equivalents (FTE) are those for which the University receives funding from the State. Fundable SCHs and FTEs are those credit hours in which revenue is generated by students who pay full price from their own funds (or finance aid) in a Florida State University System program that the state tax dollars directly support.

Non-State Fundable SCHs and FTEs are those that have no State funding of support. These include credit hour revenues generated by market rate programs. They also include other

non-state funded credit hours such as those for teaching assistants/research assistants, athletes, non-residents, employees, 60+ year old students, Department of Children and Families students, children of deceased first responders, and so on.

TABLE 16: Enrollment Information (Headcount and SCH Production)

Master of Science in Finance	State Fundable SCH	Non-State Fundable SCH	State Fundable FTE	Non-State Fundable FTE
2014-15	828	1051	35	43.79
2015-16	552	1866	23	77.75
2016-17	393	2298	16	95.75
2017-18	465	2346	19	97.75
2018-19	390	2415	16	100.63
2019-20	315	2535	13	105.63

^{*} Source: IEA SCH & FTE - Power BI IEA Internal Reports

Average Class Size and Faculty/Student Ratio

The average class size is 15 students. The student/faculty ratio is approximately 15:1. This fosters stronger engagement potential and student support from faculty and administration.

Curriculum, Including Duration of Program and Comparison to Peer Programs

The MS in Finance is a 16-month program with a 30-credit curriculum of ten 3-credit core courses and a one 1-credit supplemental Finance Boot Camp course. Students can enroll in either the fall cohort or in the spring cohort. The fall and spring semesters are segmented into two terms. The first term is 10 weeks in duration and the second term is 5 weeks in duration. Table 17 below shows the progression of course credit hour requirements by semesters and terms for each cohort.

TABLE 17: Progression of Course Credit Hour Requirements - MSF

Cohort	Fall Semester Spring Semester		Summer Semester		
	Term 1 (10)	Term 2 (5)	Term 1 (10)	Term 2 (5)	(10 Weeks)
Fall	Boot Camp	3-Credit	3-Credit	3-Credit	3-Credit Course
	3-Credit	Course	Course	Course	3-Credit Course
	Course		3-Credit		
			Course		
Fall	3-Credit	3-Credit			
	Course	Course			
	3-Credit				
	Course				

Cohort	Fall Semester		Spring S	emester	Summer Semester
	Term 1 (10)	Term 2 (5)	Term 1 (10)	Term 2 (5)	(10 Weeks)
Spring			Boot Camp	3-Credit	3-Credit Course
			3-Credit Course		3-Credit Course
			Course		
	3-Credit	3-Credit	3-Credit	3-Credit	
Spring	Course	Course	Course	Course	
	3-Credit		3-Credit		
	Course		Course		

A minimum of 30 approved credits passed with an overall grade point average of 3.0 or greater must be achieved in order to successfully complete the program and confer the degree.

Finance Boot Camp

Students begin the program with a boot camp that is designed to provide students with a refresher in quantitative methods, Finance, Accounting and Economics. The boot camp curriculum will cover materials from FIN 6406, ACG 6027 and ECP 6705. The boot camp is required and a passing grade is required for each of the modules below.

Refresher Finance Boot Camp Covers:

- Financial Accounting Concepts (ACG6027)
- Principles applicable to the accounting cycle, financial reporting and basic business taxes
- Economics and Finance (ECP6705 and FIN6406)
- Micro-economic theories of supply, demand, and the price system; firm and industry organization.
- Time value of money
- Introduction to financial management concepts and basic financial instruments
- Quantitative Methods
- Basic Algebra, Business Calculus, Basic Statistics
- Tools and applications of financial analysis and forecasting.
- Basics of Financial Modeling in Excel (e.g., Solver. etc.)

Class 1: Financial Statement Analysis (3 credits)

The emphasis of this course is placed on the analysis, interpretation, and reporting of financial accounting data. The use of Bloomberg and other databases will be part of the curriculum.

Class 2: Communication Strategies for Business Professionals (3 credits)

This course links communication skills required in the field of Finance to the research and critical thinking skills necessary for a Finance professional's success.

Class 3: Theory of Financial Management (3 credits)

An in-depth study of corporate Finance theories related to corporate investment policies, capital structure, cash distribution policies and similar topics. Practical ramification of the theories is examined.

Class 4: Financial Markets (3 credits)

A study of macroeconomic factors affecting interest rates and prices in the money, savings, and capital markets. Attention is given to the institutions in these markets and interrelations among the institutions.

Class 5: Security Analysis (3 credits)

Emphasis on the characteristics of financial assets and on major valuation models to determine intrinsic value. This course focuses on equity and fixed income instruments.

Class 6: Quantitative Methods in Finance (3 credits)

Introduces financial applications of quantitative techniques covered in areas such as probability, Probability Distributions and Descriptive Statistics, Sampling and Estimation, Hypothesis Testing, Correlation Analysis and Regression, Optimization, Time-Series Analysis and Simulation Analysis. The course requires a project using statistical software.

Class 7: Financial Modeling (3 credits)

Financial modeling using spreadsheets to conduct financial analysis for managerial decision making; special attention will be given to models in mergers and acquisitions, leveraged buyouts, venture capital, etc. This is a hands-on course that will use the FAU Trading Room and Bloomberg and other databases.

Class 8: Financial Risk Management and Derivatives (3 credits)

This course focuses on financial risk. It deals with its measurement, the derivative instruments used to trade it and the techniques used to manage it. Derivative instruments examined include options, forwards, futures, swaps, and other related derivative instruments.

Class 9: Multinational Finance (3 credits)

Financial management for international companies. Sources of funds, capital structure, investment strategies, monetary exchange problems and governmental constraints on firms operating in more than one nation are discussed.

Class 10: Portfolio Management (3 credits)

An in-depth examination of the selection, construction, and management of portfolios,

typically including stocks, bonds and cash, for individuals and/or institutional investors. It also includes portfolio performance measurement and evaluation.

Comparison to Peer Program

The Master of Science in Finance program offered at Florida International University (FIU) is the most comparable peer program in the region to Florida Atlantic University. While the content and target markets are identical, there are a number of program formatting features that differentiate the programs.

Below is the FIU MS in Finance curriculum and program format:

- 36-credits, 12 courses
- 12 month program
- 8 week terms, 2 courses per term
- 3 location options. Courses taken at location based on the specialization selected by student.
- Core Courses:
 - Corporate Finance
 - o Quantitative Methods in Financial Analysis
 - Securities Analysis
 - Financial Markets and Institutions
 - o Financial Futures and Fixed Income Investments
 - o Financial Risk Management
 - o Global Financial Strategy
 - o Financial Planning and Statement Analysis
 - o Portfolio Management
- Specialization options:
 - o International Banking
 - o Financial Management
 - o Investments
- Financial Innovations Online component

According to Table 18 above, the majority of MSF students are male (78%). Hispanics account for 24% and blacks for 18% of the total enrolled in the Fall 2019.

TABLE 18: Student Profile, Including Student Diversity and Demographics as of Fall 2019

RACE	COUNT	%
Non-Hispanic	38	76.0%
Hispanic	12	24.0%
Asian	4	8.0%
Black	9	18.0%

RACE	COUNT	%
2 or more races	0	0.0%
Pacific Islander	0	0.0%
Native American	0	0.0%
White	37	74.0%
No Answer	0	0.0%
Female	11	22.0%
Male	39	78.0%

Student Profile and Further Information Summary

Additional Demographics of the Masters of Finance students include:

- 78% Male
- 22% Female
- 80% possess Finance-related degrees and/or field experience
- 25% international students
- Average age: 30
- Average work experience: 6 years
- Average undergraduate GPA from last 60 credits: 3.4

Advising Procedures

Once a student is admitted into the program they are required to meet with their advisor for an appointment to go over important details of the program. The advisor will start with program information, duration of the program, scheduling of the program, staff and faculty introductions, features and benefits. The advisor will discuss the resources available within the University as a whole, as well as in the Executive Education Office.

There will be discussion of Graduate Student requirements, including but not limited to Academic Integrity, Continuous Enrollment, and Satisfactory Academic Performance and Academic Progression Plan. Tuition along with the several payment method options will be discussed. An advising packet will be given to the student with several pages discussing items previously discussed during the presentation for the student to read and confirm by signing. Some new items will also be discussed during this time relating to photo/video release, classroom capture, conditions of acceptance, and the option for the student to choose their instructional material package to opt in for books to be provided, or opt out of books and materials being provided. The final page in the packet relates to policies and housekeeping regarding the Bloomberg lab and laptops.

Student will acknowledge all pages in the advising packing confirming their understanding. The final portions of the initial advising appointment will be going over registration procedures and the courses the student takes. Once all questions have been answered the session is complete and the advisor will move forward and register the student for classes so long as all admission steps have been fulfilled. Advisors will monitor student progress during the semester ensuring everyone meets the GPA requirements, and successfully completes all the required courses for graduation.

Placement Rates/Employment Profile

Master student's employer and their position for the Spring of 2020 is listed in Table 19 below.

TABLE 19: MSF Spring 2020 Graduates and Employment

STUDENT	EMPLOYMENT	POSITION	YEAR
	Pinnacle Financial Services/ Financial		
Alawad, Abdullah	Services	Pension Specialist	Spring 2020
	The School District of Palm Beach		
DeMaria, Karina	County/ Education	Treasurer II	Spring 2020
Hardemon, Ashley	ComplyRight, Inc./ Human Resources	Financial Analyst	Spring 2020
Hudson-Vassell,	T3 Trading Group, LLC/ Brokerage		
Michael	Services	Proprietary Trader	Spring 2020
		Finance Manager/	
Kunkel, Sirlei	HUVEPHARMA/ Pharmaceuticals	Controller	Spring 2020
		Chairman of the Building	
Lynch, Edward	Palm Beach County	Code Advisory Board	Spring 2020
Michel, Dieunor	Lennar/ Construction	Associate	Spring 2020
		Small Business	
Raju, Jaison	Palm Beach County	Development Specialist II	Spring 2020

The placement of graduating students is shown in Appendix C: Master of Science in Finance - Placement Rates/ Employment Profile for graduates from Fall 2018 – Spring of 2020.

Table 20 below shows the retention rate of the Masters students, which averages 80% from Fall 2017- Fall 2020.

TABLE 20: Retention Rates – Masters of Science in Finance

	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
Started	19	16	16	8	13	14	28
Dropped	4	5	1	1	2	4	8
Continuing	1	0	0	1	2	1	20
Retained	15	11	15	7	11	10	20
Rate	79%	69%	94%	88%	85%	71%	71%

Table 21 shows the graduation rates of the Master students and the number of MSF degrees awarded are shown on table 22 by academic year.

TABLE 21: Graduation Rates – Masters of Science in Finance

	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
Retained	15	11	15	7	11	10	20
Graduated	14	11	15	6	9	1	0
Continuing	0	0	0	1	2	NA	NA
Rate	93%	100%	100%	86%	85%	NA	NA

TABLE 22: Degrees Awarded 2014-2020 – Masters of Science in Finance

Degrees Awarded 2014 – 2020 MSF				
Fall 2014	0			
Spring 2015	0			
Summer 2015	0			
Total AY 2015	0			
Fall 2015	0			
Spring 2016	7			
Summer 2016	1			
Total AY 2016	8			
Fall 2016	12			
Spring 2017	12			
Summer 2017	0			
Total AY 2017	24			
Fall 2017	13			
Spring 2018	6			
Summer 2018	1			
Total AY 2018	20			
Fall 2018	9			
Spring 2019	12			
Summer 2019	1			
Total AY 2019	22			
Fall 2019	11			
Spring 2020	12			
Summer 2020	0			
Total AY 2020	23			

Degrees Awarded 2014 – 2020 MSF			
Total 2015-2020	97		

Student Recruitment

Recruitment of prospective students into the Master of Science in Finance program is executed through multiple media channels and efforts.

Below are the main recruiting tactics:

- Information sessions held monthly
- Social media campaigning (Facebook, Instagram, Sun Sentinel, email distribution)
- Billboard advertisements throughout South Florida region
- Distribution of catalogs mailed to targeted markets
- Promoting at education and Career Fairs
- Recruiting at conferences and conventions
- Specialized information sessions for undergraduate Finance & business majors
- Website dedicated to covering program content and details
- Video advertisements
- Test-Drive option

Scope of Institutional Contributions

One of the features available for students enrolled in the Master of Science program is a Chartered Financial Analyst® (CFA) preparation courses. The Chartered Financial Analyst (CFA®) designation is the globally-recognized standard for establishing professional credibility within the field of financial analysis. Students interested in being a Finance or investment professional, the CFA® credential will solidify their position as a competent and credible member of the Finance profession, increase their marketability and salary potential, and certify their skills.

Master of Science in Finance students interested in pursuing the Chartered Financial Analyst designation can attend FAU Executive Educations CFA® preparation courses Level 1 & 2. Students are encouraged to start the CFA® preparation courses in their last semester.

The MSF program offers modules that complement the core courses to provide students with practical experience in the following areas:

- Python programing course
- Wealth Management series
- Bloomberg Certification and Corporate Finance Institute Courses
- Advanced Data Analytics and Excel for Financial Analysis

Mathematical Modeling and Econometrics

PhD Program with Finance Concentration

The Ph.D. in Business Administration program is an academic degree program offered by the College of Business. Concentrations are available in Accounting, Finance, Information Technology and Operations Management (ITOM), Management, and Marketing. The program has a very strong emphasis upon research. Attention is also directed to the development of the necessary skills conducive to excellent classroom teaching.

The Traditional Ph.D. program offers a concentration in Finance. The program generally consists of two years of coursework, followed by comprehensive exams and a dissertation, and it usually takes a minimum of four years to complete. The program is designed to allow for many opportunities for conducting research. The dissertation involves comprehensive research on a Finance topic that is a significant contribution beyond the foundation of related research. Dissertations completed by Finance Ph.D. students at FAU have focused on a wide variety of research topics in Finance, including initial public offerings, acquisitions of bankrupt firms, mergers, bond offerings, mutual funds, investment banking, bank regulation, and poison pills. Finance Ph.D. students are expected to remain at FAU for at least two years after the completion of their Comprehensive Exams (at the end of their second year) so that they can focus full-time on completing their dissertation.

Student Headcount

Table 23 shows the number of PhD. students by concentration based on the number of students registered for each of the fall terms over the last six years.

Table 23: PhD Student Headcount by College of Business by Department, 2015-2020

Concentration	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020
Accounting	14	15	13	11	13	15
Finance	10	14	18	16	15	17
Management	11	9	9	6	8	3
Marketing	4	4	2	1	1	0
Executive	0	0	0	0	25	44
Total	39	42	42	34	62	79

Finance has had consistent and high levels of enrollment over a long period of time, and has had a successful history of placement of graduates.

Table 24 shows the number of admissions by concentration for the past six years. Students only begin the program in the fall term. The Finance area has admitted 2-4 students each

year over the past 6 years. Admissions are primarily based on the quality of applicants. In particular, we consider grades, GMAT scores, writing samples, letters of recommendation, and any other signals of research ability (such as research papers, work experience, or other things indicated in the applicant's CV). We also try to ensure a fit with the research interests of the faculty to ensure that the student will receive the best support possible.

Table 24: PhD Student Admissions by College of Business Department, 2015-2020

Concentration	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020
Accounting	3	3	4	3	4	4
Finance	3	4	4	2	4	4
Management	1	5	2		3	
Marketing						
Executive					25	23
Total	7	12	10	5	36	31

Table 25 shows the number of graduating PhD students by concentration during the indicated academic year for the past five years.

During 2014-2017, there were only a few faculty members that were chairing dissertations and/or serving as dissertation committee members. During 2016 – 2018, the Finance Department hired three new faculty members, including two chaired full professors, each of which is working with PhD student in one or both of these roles. Rebel Cole joined the faculty in Fall 2016, while Douglas Cumming and Sofia Johan joined in Fall 2018. As the graduation numbers show, the graduation numbers have increased markedly during the past three academic years.

Table 25: PhD Student Graduates by College of Business by Department, 2015-2020

Concentration	2014- 2015	2015 - 2016	2016 – 2017	2017 - 2018	2018 - 2019	2019 - 2020
Accounting	4	1	6	4	2	2
Finance	2	0	0	4	4	2
Management	1	5	2	1	1	3
Marketing	0	0	2	1	0	1
Executive	0	0	0	0	0	0
Total	7	6	10	10	7	8

Curriculum Compared to Peer Programs

Table 26 shows a comparison of PhD coursework at FAU and four peer programs, Georgia State University (GSU), Oklahoma State University (OSU), Florida State University (FSU)

and Florida International University (FIU). Each peer institution, except GSU, completes its courses in 2 years, with the comprehensive exams at the end of the second year. (GSU is now 2.5 years, but their program director informed us that it is moving to 2 years shortly). Our recent (2020) move from comprehensive exams in January of the 3rd year to the end of the second-year fits with the normal PhD Finance standard practice.

Other programs have fewer required elective courses, and fewer courses required in total.

GSU, OSU, and FSU are 5-year programs with an option for a 6th year at GSU. FIU is the only other 4-year PhD program in Finance (other than FAU).

Table 26: Comparison of PhD Coursework with Peer Programs

Courses	FAU	GSU	OSU	FSU	FIU
Teaching seminar	3				
Foundation courses	9	18	15	21	18
Statistics	12	9	15	21	6
Concentration seminars	18	15	24	21	18
Independent research courses	6				
Electives	15				
Dissertation	18		15		
Total	81	42	69	63	42

Pedagogical Innovations

There have been four main pedagogical innovations in the past five years.

First, we shortened the time to writing comprehensive exams. Prior to 2020, comprehensive exams were written in January of the third year of the program. In 2020, we moved the comprehensive exams to May of the second year of the program. The shortened time to writing the comprehensive exams has allowed students more time to work on their thesis topics. The two students that wrote their exams in comprehensive exams in May 2020 passed by a large margin. This change was made possible by rearranging the timing of PhD seminars to both the fall and spring semesters (previously they were only in the spring semesters).

Second, we increased the scope and depth of the oral exams that go along with the written part of the comprehensive exams. The lengthier oral exams have enabled us to not only identify problematic students (including one that had to be removed from the program in 2019), but also to identify students that in fact were much better than we had initially thought based on a written exam.

Third, we introduced The Empirical Methods Seminar (FIN 7932) in 2016. This course focuses on providing Ph.D. students with the modern empirical toolkit necessary for corporate Finance and accounting research, including modern econometric tools to address endogeneity concerns, cross-sectional methods, structural estimation, and bivariate models. Lectures, readings, and empirical assignments are designed to help student learn the econometric intuition behind each method and exposes them to examples of these methods used in published and working papers. In addition, course assignments require students to use the methods analyzed in the course (learning by doing). Finally, referee reports assignments help student to think critically regarding the methods used and identification challenges of the papers.

Fourth, we introduced a Financial Institutions Seminar (FIN7932) taught by Prof. Cole in Spring 2017. This course introduces Ph.D. students to a wide variety of databases beyond Compustat and CRSP, and provides them with another area of Finance in which to conduct research. The seminar requires students to identify a research topic that uses one of these non-traditional databases and write a first draft of a working paper.

Placement Rates/Employment Profiles

Placements have been largely directed at teaching schools that have a "3-3" teaching load. With the move of our comprehensive exams to the end of the second year, we could aim to place students at more research-intensive schools that have 2-3 or 2-2 teaching loads. Table 27 shows an abbreviated listing of PhD placements, while **Appendix D: Finance PhD Placements** (since inception of program) has a complete listing of placements.

Table 27: Finance PhD Placements, 2015 - 2020

STUDENT	YEAR	INITIAL PLACEMENT	
BhyuyN, Md Nazmul Hasan	2020	North Carolina A&T State University	
Tindall, Greg	2020	Palm Beach Atlantic University	
Faulkner, Matthew	2019	San Jose State University	
Shelton, Austin	2019	California State University - San Bernardino	
Carrete-Rodriguez, Angel	2018	Concordia College - Moorhead, Minnesota	
Danso, Charles	2018	California State University - Los Angeles	
Hossain, Miran	2018	University of North Carolina - Wilmington	
Jansen, Benjamin	2018	Middle Tennessee State University	
Kaprielyan, Margarita	2017	Elon University - North Carolina	
Smith, Garrett	2015	University of Wisconsin - Whitewater	
Volkov, Nikanor	2015	Mercer University - Georgia	

Faculty - Currently Teaching Doctoral Students

Anna Agapova is an Associate Professor of Finance at Florida Atlantic University. She holds PhD in Finance and MA in Economics from Georgia State University, and an

undergraduate degree in Marketing from Karaganda State University. Her primary research interests are investments, ETFs and mutual funds, financial markets, and corporate Finance. She has published in peer-reviewed journals including the *Journal of Banking and Finance*, Financial Management, the Journal of Financial Markets, the Financial Review, the Journal of Portfolio Management, the International Review of Financial Analysis, the European Journal of Finance, the Journal of Applied Finance, the Quarterly Review of Economics and Finance, the North American Journal of Economics and Finance, Research in International Business and Finance, Advances in Quantitative Analysis of Finance and Accounting, the Journal of Asset Management, the Journal of Investing, and the Journal of Index Investing. According to Google Scholar, her research has been cited 375 times. She has received Outstanding Paper Award from the Eastern Finance Association and was a Finalist in the Whitebox Selected Research search for the Best Financial Research paper. She teaches graduate and undergraduate courses in investments and corporate Finance. Prior teaching experience includes teaching corporate Finance and derivatives markets courses at Georgia State University, and principles of economics at Karaganda State Industrial University, Kazakhstan. Industry experience includes consulting work at INTECH.

Rebel Cole, Ph.D., CRE, is the Lynn Eminent Scholar Chaired Professor of Finance in the College of Business at Florida Atlantic University in Boca Raton, FL. Previously, he has taught at DePaul University in Chicago, UNSW in Sydney and the University of Auckland in New Zealand. He received his PhD in Business Administration from the University of North Carolina in 1988, after which he spent ten years working as a financial economist in the Federal Reserve System. Dr. Cole is a special advisor to the Asian Development Bank, the International Monetary Fund, the World Bank and other non-governmental organizations, providing training and technical assistance to central banks around the world in more than 60 countries. Dr. Cole has published peer-reviewed articles in many of top academic Finance journals, including The Journal of Finance, the Journal of Financial Economics, the Journal of Financial & Quantitative Economics, the Journal of Financial Intermediation, the Journal of Corporate Finance, the Journal of Banking & Finance, the Journal of Real Estate Finance and Economics, Real Estate Economics, and the Journal of Portfolio Management, among others. His research has been featured in Business Week, the Financial Times, Fortune, the New York Times and the Wall Street Journal. According the Google Scholar, his research has been cited more than 10,000 times. His primary areas of research are corporate governance, entrepreneurship, financial institutions, and real estate.

Douglas Cumming, J.D., Ph.D., CFA, is the DeSantis Distinguished Professor of Professor of Finance and Entrepreneurship at the College of Business, Florida Atlantic University in Boca Raton, Florida. Douglas has published over 185 articles in leading refereed academic journals in Finance, management, and law and economics, such as the *Academy of Management Journal, Journal of Financial Economics, Review of Financial Studies*, *Journal of Financial and Quantitative Analysis*, and *Journal of International Business Studies*, and has been cited over 17,000 times according to Google Scholar. He is the Editor-in-Chief of the *British Journal of Management* (2020-2022), the *Journal of Corporate Finance* (2018-2020), and the *Review of Corporate Finance* (2021-). He is the Founding Editor of *Annals of Corporate Governance*, and a former Co-Editor of *Finance Research Letters* and *Entrepreneurship Theory and Practice*. Douglas has published 18

academic books. His most recent book is Crowdfunding: Fundamental Cases, Facts, and *Insights* (Elsevier Academic Press, 2019) complete with companion materials. He is the coauthor of Venture Capital and Private Equity Contracting (Elsevier Academic Press, 2nd Edition, 2013), and Hedge Fund Structure, Regulation and Performance around the World (Oxford University Press, 2013). He is the Editor of the Oxford Handbook of Entrepreneurial Finance (2013), the Oxford Handbook of Private Equity (2013), the Oxford Handbook of Venture Capital (2013), the Oxford Handbook of Sovereign Wealth *Funds* (2018), the *Oxford Handbook of IPOs* (2019), the *Research Handbook of Finance* and Sustainability (2018), and the Research Handbook of Investing in the Triple Bottom *Line* (2019). Douglas is a regular speaker at academic and industry conferences around the world. He has given recent keynote speeches at the British Academy of Management Corporate Governance Conference, Entrepreneurial Finance Association, Financial Research Network Corporate Finance Conference, French Finance Association, Infiniti Conference on International Finance, Vietnam Symposium in Banking and Finance, the Budapest Liquidity and Financial Markets Conference, and the Humbolt University of Berlin Fintech Conference, among numerous others. Douglas' work has been reviewed in numerous media outlets, including the Chicago Tribune, The Economist, The New York Times, the Wall Street Journal, the Globe and Mail, Canadian Business, the National Post, and The New Yorker.

Dr. Luis García-Feijóo, CFA, CIPM, is an Associate Professor of Finance at Florida Atlantic University. He teaches Investments, International Finance, and Corporate Finance. He also serves as Co-Editor of *Financial Analysts Journal* and as Associate Research Director for *CFA Institute Research Foundation*. Prior to joining FAU, he worked as Director, Exam Development at CFA Institute, and was an Associate Professor at Creighton University. Dr. García has published his research in leading academic and practitioner journals such as the Journal of Finance, Review of Asset Pricing Studies, Journal of Banking and Finance, Financial Analysts Journal, and the Journal of Portfolio Management. He is the co-author of the book "Invest with the Fed: How to Maximize Portfolio Performance following Federal Reserve Policy." According to Google Scholar, his research has been cited more than 860 times. Dr. García earned the Chartered Financial Analyst (CFA) designation in 2001 and the Certificate in Investment Performance Measurement (CIPM) in 2011. He holds a Ph.D. in Finance from the University of Missouri-Columbia. He actively served on the Board of Directors of the CFA Society of South Florida from 2009-2014, and has been an active volunteer for CFA Institute since 2009.

Dr. David Javakhadze is an Associate Professor of Finance at the College of Business. He joined Florida Atlantic University in 2014 after completing his PhD in Finance at the University of Missouri. Dr. Javakhadze has published a dozen articles in high-quality Finance journals. His research interests focus on empirical corporate Finance, including examining the role of social and economic networks on various aspects of corporate policies, policy implications of corporate social responsibility, and government contracting. His research papers have been featured on The Harvard Law School Forum on Corporate Governance and Regulation, which is the top online resource for discourse on corporate governance. Although published relatively recently, Dr. Javakhadze's publications have made an important contribution to the literature as reflected in more than 350 citations per Google scholar. His papers posted on Social Science Research Network were listed on the

Top Ten download list a number of times in several distinct categories. His papers have been nominated and won best paper awards in reputable Finance conferences. Dr. Javakhadze's research has been cited in the popular press, including Forbes.

Dr. Anita Pennathur is a professor in the Department of Finance. Her research covers financial markets and institutions, corporate governance and policies, real estate Finance, and fintech. She has published widely in leading journals in Finance, real estate, and accounting, to include *Real Estate Economics*, the *Journal of Banking & Finance*, and the *Journal of Accounting, Auditing, and Finance*. According to Google Scholar, her research has been cited almost 600 times She teaches financial institutions and markets in the undergraduate and graduate programs, Corporate Finance in the Executive Education program, and a doctoral seminar in Capital Markets.

D. Faculty

Administrative Structure of the Finance Department

The administrative structure of the department consists of a Department Chair, 6 full professors (includes the COB Dean, and Associate Dean), 7 Associate professors (includes the Department Chair), one assistant professor, and two instructors.

Faculty Profile, Rank and Teaching Load

Table 28 shows the Faculty in the Department of Finance, their academic specialty and teaching load.

TABLE 28: Finance Faculty Profile, Rand and Academic Specialty

FACULTY NAME	RANK	ACADEMIC SPECIALTY	TEACHING LOAD
Agapova, Anna	Associate Professor	Investments, ETFs, Mutual Funds, Capital Markets, Corporate Governance	2/2
Barnhart, Scott	Associate Professor	Corporate Finance, Investments	2/3 LCVS Course
Cheng, Ping	Professor	Real estate – Investment, Portfolio Management, Liquidity Risks, Housing Market	2/2
Cole, Rebel	Lynn Eminent Scholar Chaired Professor of Finance	Corporate Governance, Entrepreneurship, Financial Institutions, Real Estate	1/1

FACULTY NAME	RANK	ACADEMIC SPECIALTY	TEACHING LOAD
Cumming, Douglas	DeSantis Distinguished Professor of Finance and Entrepreneurship	Corporate Finance, Entrepreneurial Finance, Financial Intermediation, Fraud, Securities Regulation, Law and Finance	3/YR - Finance Boot Camp, Theory of Financial Management, Crowdfunding
Garcia- Feijoo, Luis	Associate Professor	Empirical Asset Pricing, Real Options, Payout Policy, Mergers and Acquisitions, Security Issuance	2/2
Giannetti, Antoine	Associate Professor	Asset Pricing, Real Estate, Derivatives	2/2
Javakhadze, David	Associate Professor	Empirical Corporate Finance	2/2
Johan, Sofia	Assistant Professor	Corporate Finance, Entrepreneurial Finance, Alternative Investments (VC/PE/Hedge Funds), Alternative Finance (Fintech/Peer to Peer Lending/Crowdfunding	2/2
Johnson, Kenneth	Investments Limited Professor and Associate Dean	Real Estate - Housing (Pricing, Duration, and Likelihood of a Transaction), Buy vs Rent, Real Estate Cycles	4/yr.
Knight, Rainford	Instructor	Investment Management and Portfolio Construction, Hedge Funds and Private Equity Funds, Financial Modeling	4/4
Pennathur, Anita	O'Maley Distinguished Professor and Stone Fellow	International Financial Market Integration, Developing Countries and Economic Development, Performance, Governance, and Regulation of Multinational Institutions and Markets	2/2

FACULTY NAME	RANK	ACADEMIC SPECIALTY	TEACHING LOAD
Pomeranets, Anna	Instructor	Market Microstructure, Regulations and Financial Innovations	4/4
Yang, Charles	Associate Professor	Insurance, Risk Management, Financial Services	2/2
Zarruk, Emilio	Associate Professor and Department Chair	Financial Management, International Finance	2/2

Faculty Diversity

The table 29 below lists the Finance faculty and their ethnic origin.

TABLE 29: Finance Faculty Diversity

FACULTY NAME	ETHNICITY
Agapova, Anna	Caucasian (Russian)
Barnhart, Scott	Caucasian
Cheng, Ping	Asian (Chinese)
Cole, Rebel	Caucasian
Cumming, Douglas	Caucasian
Garcia-Feijoo, Luis	Caucasian (Spanish)
Giannetti, Antoine	Caucasian (French)
Javakhadze, David	Caucasian (Georgian)
Johan, Sofia	Asian (Austronesian)
Johnson, Kenneth	Caucasian
Pennathur, Anita	Asian (Indian)
Pomeranets, Anna	Caucasian (Russian)
Yang, Charles	Asian (Chinese)
Zarruk, Emilio	Hispanic (Nicaraguan)

Faculty Teaching Load and Methods of Calculation

Faculty teaching loads are determined primarily as a function of research productivity in high-quality journals. In addition, administrative assignments are also factored in the assignment of teaching loads.

Summary of Faculty Scholarship and Research Productivity, Including Grants and Publications

Please refer to E. Research regarding Faculty Research and Productivity.

Strategic Planning for Hires

Given the current uncertainty due to the COVID 19 pandemic, and considering our recent hires (2 full professors and one assistant professor) over the past three years, we have no plans for new hires for the foreseeable future.

E. Research

Review of Part II of the Departmental Dashboard Indicators for the Department of Finance

The Finance faculty has had a very strong record of research productivity over the past 5 years. The output of peer-reviewed publications and professional meeting presentations has followed an upward trend as shown in the table 30 below. One area we do not show activity is in grant proposals.

TABLE 30: Research/Scholarly Productivity Finance

Finance	College Total	University Total			
(by count)	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018- 2019
1. Books (including monographs & compositions)	1	2	2	3	95
2. Other peer-reviewed publications	17	29	36	137	1,376
3. All other publications	1	1	5	35	565
4. Presentations at professional meetings or conferences	26	29	33	168	1,676
5. Productions/Performances/Exhibitions	0	0	0	0	514
6. Grant proposals submitted	0	0	0	4	290

Interdisciplinary Efforts and Community Engagement Efforts

• The Finance Department worked with the Management Department in February 2020 to organize two international conferences at the FAU Office Depot Center for Executive Education. These conferences have helped strengthen the College of Business's academic reputation by bringing a variety of international and nationally renowned scholars to FAU to present and discuss their research. More importantly, the conferences provided both constructive and practical experiences for both Finance and Management PhD students as they were involved in organizing and hosting the conferences. As they welcomed the participants to FAU, they were able to network and share ideas with academics from around the world and we at FAU were able to showcase the strength of our faculty and PhD programs.

- The Finance department hosted the Boca Corporate Finance and Governance Conference from November 13 to November 15, 2020. This 3-day virtual corporate Finance conference enabled 69 international and nationally renowned scholars to present and discuss their research. Due to COVID-19 this conference, initially planned to be held in person, was moved online. This enabled us to open registration for this event to participants from around the world. The link to the full program: https://sites.google.com/view/review-of-corporate-Finance/boca-conference?authuser=0
- Beracha, Hardin and Johnson Buy vs Rent Index is found at the website: https://business.fau.edu/departments/Finance/real-estate-initiative/bhj-buy-vs-rent-index/ The index measures the upward or downward pressure on the demand for homeownership. Directional pressure, measured on a scale between 1 and -1, provides an indication of the next movement in housing prices in 23 major metropolitan areas around the country. Index scores enable consumers of real estate, industry professionals and policy makers to make more informed decisions. BH&J is produced by department member Dr. Ken H. Johnson in conjunction with two faculty (Dr. William G. Hardin and Dr. Eli Beracha) at FIU's Hollo School of Real Estate. The index is housed in FAU COB's Department of Finance with results provided quarterly. Results have gained attention in national media outlets such as the New York Times. (https://www.nytimes.com/2016/04/02/your-money/to-buy-or-rent-a-home-weighing-which-is-better.html)
- The COVID-19 Florida Tracker at Florida Atlantic University was developed during June 2020 as a community resource for monitoring key metrics related to the COVID-19 situation in Florida and 22 select Florida counties. The tracker relies upon publicly available data provided by the state of Florida. The tracker creators have arranged the figures in a format to give users the clearest picture of the coronavirus pandemic in the Sunshine State. There are key metrics for monitoring: testing, hospitalizations, and deaths. A variety of charts are presented for each metric in each jurisdiction. The tracker was developed by department member Prof. Rebel A. Cole in conjunction with department PhD student Jon Taylor. It is housed in the FAU College of Business and is updated daily. Results have gained attention in the local, state, and national media.

Establishment of Goals for Research

Goals for research are established by the College of Business/Finance Department Guidelines for promotion and tenure. In addition, our faculty annual evaluations provide faculty with feedback about their progress toward tenure and promotion. Untenured faculty also receive an appraisal towards tenure with recommendations to the faculty member about their research progress and productivity.

Assessment of How Well Research Goals are Being Met

Table 31 below shows the average Chair evaluation results of the Finance faculty for the research area from 2015 to 2019. The primary factor in these evaluations are the number of papers accepted for publication in refereed journals for the indicated calendar year. Finance faculty research productivity has improved over time.

Publication quality is based on the Association of Business Schools (ABS) journal rankings. Over the period from 2015 to 2020, the Finance faculty have had 8 articles published in ABS 4*, 28 articles published in ABS 4, and 77 articles published in ABS 3 journals.

TABLE 31: Chair Evaluations of Research, 2015-2020

Year	Research Evaluation Average 5=Exceptional to 1=unacceptable
2019	4.08
2018	4.04
2017	4.04
2016	3.42
2015	3.25

In terms of efficiency, with the exception of "All other publications per faculty", the Finance faculty surpasses the College of Business and the University for 2018-2019 as indicated by the data in the table 32 below.

TABLE 32: Finance Efficiency Data

Fina	College Total	University Total			
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018-2019
1. Books (including monographs & compositions) per faculty member	0.1	0.2	0.2	0	0.1
2. Other peer-review publications per faculty member	1.3	2.4	2.8	1.5	2
3. All other publications per faculty member	0.1	0.1	0.4	0.4	0.8
4. Presentations at professional meetings or conferences per faculty member	2	2.4	2.5	1.9	2.4
5. Productions / Performances/ Exhibitions per faculty member	0	0	0	0	0.7
6. Grant proposals submitted per faculty member	0	0	0	0	0.4

Scholarly output (Section II, C 1-9) per tenured and tenure earning faculty member (Section I B). Beginning with the 2018-2019 year the Departmental Dashboard Indicators Include 2019 Calendar Year Activity.

F. Service and Community Engagement.

• Dr. Cole served as a short-term expert for the Asian Development Bank (ADB), the International Monetary Fund (IMF), and the World Bank (WB).

During 2017, Dr. Cole led an IMF mission to Sierra Leone to train the staff of the Central Bank of Sierra Leone on how to design, develop and implement stress tests for the Sierra Leone banking system. During 2017, Dr. Cole also assisted the WB in developing a suite of bank stress tests for the Central Bank of Qatar to use in supervising its banking sector. During 2018, Dr. Cole led and participated in three WB missions to design and develop bank stress tests for the Reserve Bank of India to use in supervising its banking sector. During 2018, and again in 2019, Dr. Cole also participated in WB missions to advise and assist the Central Bank of Zimbabwe on how to restructure its banking system. During 2020, Dr. Cole participated in an assessment of the financial sector of Sierra Leone as part of the IMF's Financial Sector Surveillance Program. Because of Covid-19, the IMF team conducted interviews with member of the Central Bank of Sierra Leone remotely

via WebEx. During 2020, Dr. Cole also worked with the ADB to produce a policy brief on how the U.S. Small Business Administration provides credit and credit guarantees to small businesses as an example of "best practices" for governments seeking to improve access to credit by their small businesses.

- Dr. Cole regularly serves as a resource for staff of the U.S. Senate's Small Business committee, advising them on developments in access to credit by small businesses in the US.
- Dr. Cole serves on the advisory boards of two U.S. start-up companies.
- Starting in Fall 2020, students in FIN4422 Cases in Financial Management taught by Sofia Johan will take part in a semester-long project to help entrepreneurs in Palm Beach and Broward counties sustain and grow their businesses. Working with the Florida SBDC at FAU, part of a national network that provides specialized consulting services to small businesses, we have created 10 case studies that reflect common problems firms are facing in the era of COVID-19, such as reduced customer bases, financial losses and the lack of available investment capital. The students will strategize and prepare consulting reports that aim to highlight financial management issues and offer solutions that SBDC business consultants will share with small business owners in the region. The assignment allows the students to develop real-world problem-solving skills, while affected companies can benefit from fresh ideas from our senior Finance students that could lead to new business models (see http://www.fau.edu/newsdesk/articles/entrepreneurs-covid.php)
- Department of Finance faculty appear regularly in local, regional and national media outlets providing insight and expert opinion on issues such as asset valuation, corporate performance and investment analysis, among others. Direct links to much of their work can be found at FAU Business in the Media (https://business.fau.edu/our-college/in-the-media/).
- On October 28, 2020 Luis Garcia was one of the three speakers at a free COVID-19 webinar organized by Caridad Center as a fund raising event. Caridad Center is the largest free clinic in Florida: https://caridad.org/. The other speakers were Dr. Terry Adirim from FAU and Dr. Jack Michel, founder of Larkin Health Systems and Larkin University.
- On August 19, 2020 Luis Garcia was the first speaker to present in Spanish at FAU's Research in Action (Descubrimiento en Acción). He spoke about the impact of Covid-19 on financial markets: http://www.fau.edu/research/research-in-action-espanol/index.php

Review of Part III of the Departmental Dashboard Indicators for Department of Finance

The Finance faculty are fully engaged in service activities to the Department, the College, and the University. Table 33 below shows the Finance faculty are committed to service in community and professional committees as well. We have a strong faculty representation in academic Finance journals as referees and editors. One example is Douglas Cumming who currently serves as managing Editor in-Chief for the *Journal of Corporate Finance* (2018-2020), and for the *British Management Journal* (2020-2022), both category 4 journals in the ABS list of journal rankings.

Table 33: Service Productivity Finance

		Finance		College Total	University Total
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018- 2019
1. Faculty memberships on department, college or university committees	18	33	27	299	2,561
2. Faculty memberships on community or professional committees	8	9	7	122	1,246
3. Faculty serving as editors or referees for professional publications	25	7	48	146	619

Source: College Dean's Offices; Beginning with the 2018-2019 year the Departmental Dashboard Indicators Include 2019 Calendar Year Activity.

Establishment of Goals for Service

Service assignments for faculty vary by faculty rank. Assistant professors are initially given lighter service assignments to allow them to advance their research productivity.

The numbers reported in the table below are not an accurate representation of the service efforts for the Finance faculty. The data are annually reported by the Department to the University's Office of Institutional Effectiveness and Analysis. The data are probably taken from the Annual Activity Reports submitted each year, providing input to the Chair for the faculty Annual Evaluations. Efforts will be made to ensure that all service activity is accurately reported each year.

While the average numbers per faculty look more or less accurate for (1) below, they look under representative for (2) and (3). A more accurate impression of service activity by each faculty member can be obtained by reviewing the resumes of each faculty member in this link, a supplemental file to this document.

Table 34: Service Efficiency Data

	Finance			College Total	University Total
	2016- 2017	2017- 2018	2018- 2019	2018- 2019	2018- 2019
1. Faculty memberships on department, college or university committees per faculty member	1.4	2.8	2.1	3.3	3.7
2. Faculty memberships on community or professional committees per faculty member	0.6	0.8	0.5	1.4	1.8
3. Faculty serving as editors or referees for professional publications per faculty member	1.9	0.6	3.7	1.6	0.9

Faculty committee memberships and faculty serving as editors or referees (Section III B 1-3) per tenured and tenure earning faculty member (Section I B 1); Beginning with the 2018-2019 year the Departmental Dashboard Indicators include 2019 Calendar Year Activity.

G. Strengths and Opportunities that Support Achievement of Program Goals

High-Quality Pool of Applicants to our PhD Program and Good Enrollments

We have a steady pool of high-quality applicants and enrollments. We have a successful record of graduations and placements. The dissertations produced have likewise been successful and translated into journal articles for students.

We could increase the ranking and visibility of the program. Improved rankings could come from enabling more research opportunities for students. In particular, we could extend the length of the time to complete a dissertation and program from the end of year 4 to the end of year 5. Alternatively, we could offer a one-year post-doctoral fellowship to students that can defend by the end of year 4. Currently, most PhD programs in Finance are 5 years. A four- year program is quite short, and does not enable students to be as competitive on the market. The additional time in the program would afford the development of better thesis projects, as well as enable more time to go to conferences and get feedback on work. The extra time could also enable more networking opportunities for students, and enable time to secure R&R decisions or publications prior to graduation. Faculty engagement is growing, and with a 5-year program there would be even more incentives for faculty to be engaged with students.

Great Location

We have a highly sought after tourist location which helps to attract students and faculty. Also, Florida has no personal income tax. The Boca Raton and South Florida area is home to a significant number of companies in the financial services industry. Our location also provides us with opportunities to host academic and professional meetings.

New Executive Education Center

The new Executive Education Center housed at the Schmidt Family Foundation Complex for Academic and Athletic Excellence opened in 2020. The state-of-the art technology will attract more quality students to our Master of Science in Finance program.

H. Weaknesses and Threats that Impede Program Progress

PhD Student's Teaching Requirements, Financial Aid and Data

Our weaknesses are in the extent to which we have sufficient resources. There is limited financial aid for students, and it is unclear if there is enough funding for a 5-year program. Likewise, subscriptions to Finance databases are sparse, which limited the topic on which students and faculty can conduct research. A list of subscription databases is attached in **Appendix E: Research Databases.**

Currently, PhD students are required to teach, which detracts from the students' research activities, especially during their later years.

Changes in the Department's standards for promotion and tenure

Rising standards for promotion to full professor evident in recent decisions have created a challenging environment for some associate professors with weak records of publications and citations. This could affect the cohesiveness of the department's faculty, and the ability to work together.

Lack of Grading Standards

Lack of grading criteria for courses could lead to grade inflation. Many other schools require average grades fit within a specified range, while we do not.

I. Resource Analysis

Cancellation of Datasets

Likely cancellations of subscriptions to some research datasets following budgetary issues resulting from the COVID 19 pandemic could pose some problems for our faculty and doctoral students in the future

J. Future Direction

We will introduce an Entrepreneurial Finance Seminar that will be taught by Professor Cumming starting in the Fall 2021. This course introduces Ph.D. students to numerous datasets in entrepreneurial Finance, such as data in crowdfunding, venture capital, private equity, trade credit, and other sources. The course provides opportunities to conduct new research in entrepreneurial Finance. The seminar requires students to identify a research topic that uses these non-traditional databases and write a first draft of a working paper.

K. Questions for the Review Team

- 1) We need students to have a competitive advantage as they join the extremely challenging job market. In view of the changes in the financial industry, how do we prepare our students for the new landscape?
- 2) Compared to our undergraduate Finance program, all schools reviewed offer a wider array of Finance elective courses to their majors. In contrast, our program requires courses that are broader in scope than the programs reviewed, and fewer Finance electives. Should we change our curriculum to offer concentrations or specialized tracks for students to choose from?
- 3) Should the PhD program be 5 years instead of 4? Or should we offer a one-year postdoctoral fellowship to students who defend prior to the end of their fourth year? Should teaching requirements in the PhD program be changed, perhaps with the same requirements overall but spread out over 5 years?
- 4) The Covid-19 pandemic and anticipated difficulty in placing student, should enrollment in the PhD program be reduced?
- 5) Should we require a teaching course in the PhD program? It seems to be an outlier relative to other programs.
- 6) The use of technology is changing how courses are developed and delivered. Course development with technology can be described as having early and heavy faculty input/investment with a decrease in faculty effort per unit of delivery for future courses. What are the implications for: (a) faculty ownership of developed content; and (b) courses loads?
- 7) The Covid-19 pandemic has dramatically affected the number of sections taught online and in hybrid mode. What are your reflections on how this will and should affect the use of our online/remote course delivery in the future?
- 8) Do you have any best practices you can share with how to increase the diversity of our faculty and staff profile? How we can attract more minority students to our PhD program?
- 9) The Covid-19 pandemic has dramatically affected the population of Manhattan, one of the most important centers/concentrations of finance in the world. Various media have reported stories of finance firms migrating to south Florida, particularly West Palm Beach and Fort Lauderdale. How would you advise the Department to monitor and respond to this trend? What initiatives might the Department/College undertake to strengthen our relationship with the finance sector in south Florida?

Appendix A: Assessment Plan -- 2018-2019

Finance majors are required to complete the interdisciplinary College of Business Core with grades of C or higher in each of the following courses:

Business Law I	BUL4421
Operations Management	MAN3506
Writing for Management	ENC3213
Global Strategy & Policy	MAN4720
Principles of Financial Management	FIN3403
Quantitative Methods in Administration	QMB3600
Management Information Systems	ISM3011
Marketing Management	MAR3023
Introduction to Management & Organizational Behavior	MAN3025

Content Knowledge (Declarative Knowledge): Students will demonstrate knowledge of fundamental concepts in several areas of business, including capital budgeting, forecasting cash flows, estimating the cost of capital, valuation of real and financial assets.

Specifically, the learning outcomes that accompany this objective are the following:

- Interpret and apply financial ratio and common size analyses to financial statements and other financial disclosures to evaluate the financial health and performance of a company.
- Facilitate financial decision-making by applying financial math and valuation principles to value securities, capital projects, and other assets.
- Assess the risk associated with a financial or capital asset, identify the relevant risk, and estimate the cost of capital for financial decision-making purposes.
- Apply the net present value and internal rate of return techniques to make project selection decisions in a capital budgeting context and perform sensitivity analysis in capital project decision-making.

The assessment is administered by the Coordinator of Principles of Financial Management (FIN3403), but all instructors of the course participate by contributing questions, reviewing questions, and updating questions. Other faculty members in the department are encouraged to participate in these tasks as well. The assessment will be conducted during final exams. Students enrolled in FIN3403 in each semester, will be given a set of questions in their final exams for the purpose of assessment. Each instructor of FIN3403 will incorporate the same set of questions in the final exam for their respective sections.

Instructor will not identify to students the specific questions in their final exams that will be used for assessment. The results from every section will be collected and analyzed by the coordinator for the course.

Each instructor is invited to review the results of the students taking their course. However, the primary purpose of the assessment is to provide information that will be productive for continual improvement of the course in general. To this end, the results of the assessment will be reported to the entire Finance faculty, with breakdowns provided in terms of demonstrated learning on the elements of the Body of Knowledge. The assessment is not intended as a device to evaluate instructors and no results will be compiled or distributed identified by instructor. This information will then be used by the FIN3403 Coordinator, in conjunction with the entire Finance faculty, to address whether the students are mastering the Principles of Financial Management Body of Knowledge and what course of action must be taken, if any, to help students master this body of knowledge. Table A1 shows the summary results of assessments from Fall 2019 and Spring 2020.

Table A1: Assessment Data Summary

Course	Spring 2020	Fall 2019
Sample Size	248	377
Test Average	57	55
New 2017	Latest	Latest
	% correct	% correct
1. You are investigating two mutually exclusive	72.18%	68.17%
2. You borrow \$200,000	70.56%	73.47%
3. Great Owl Corp	75.40%	69.50%
4. Ginger Baker	64.11%	55.17%
5. Snapdog Inc (Calc NPV)	81.85%	81.96%
6. Razer Inc (Calc CFs)	58.06%	57.56%
7. The risk -free rate	73.79%	75.86%
Average	70.85%	68.81%

Students will demonstrate their abilities to report results from their financial analyses both orally and in written form in a clear and grammatically sound manner. Students will also demonstrate skills in discussing case solutions presented by peers.

Use Cases in Financial Management (FIN4424) and Writing for Management (ENC/GEB 3213) as vehicles for preparation of students taking FIN4422. FIN4422 requires at least one oral case presentation, participation in class discussion and the execution of written case solutions. Students requiring remediation of writing skills will be referred to Florida Atlantic University's Center for Excellence in Writing (UCEW). Students requiring remediation of presentation skills will be encouraged to address problems in a second case presentation.

Formal assessment methods (documented below) and program improvement strategies (documented below) underwrite this process.

Assessment of communication skills will include:

- Faculty evaluation of individually written case reports for clarity of exposition, strength of argumentation and grammatical soundness. Feedback to students will minimally consist of a report grade and advice.
- Faculty evaluation of student (either individual or group) presentations of cases. Faculty will evaluate these presentations for clarity of exposition, strength of argumentation, responsiveness to audience questions and engagement of audience. Feedback to students will minimally consist of a presentation grade and advice.
- Faculty evaluation of student (either individual or group) discussion of cases. Faculty will evaluate these discussions for degree of participation and effectiveness of their interaction with peers and presenters. Feedback to students will minimally consist of a discussion grade and advice.

To complete the communications component of the degree, a student will have to be successful in achieving 70% of the cumulative score in case presentations, discussion of presentations, and the written cases. Table A2 provides the assessment results for two recent semesters.

Table A2: Assessment Data Summary

Course	Spring 2020	Fall 2019	
Sample Size	320	320	
Test Average	90.51	89.23	
	Median	Latest	
	% correct	% correct	
Case Assignment 1	90	85	
Case Presentation	90	90	
Case Assignment 2	89	85.5	
Case Assignment 3	89	88	
Final Exam- Requires Respondus LockDown Browser	88	89	
Excel Crash Course	100	100	
Class participation	100	100	
Midterm		89.5	
Test average	90.51	89.23	

The data from the 8 assessment questions for Spring of 2020 (9 in Fall 2019) show a slight increase in the average percent of median correct responses of 90.51% over the Fall 2019 figure at 89.23%. This same data over time and individual assessment components in each term however indicates an increase in the knowledge base of the courses and the material tested in the questions. Questions 1, 3 and 4, which are case reports with a 10-page minimum continue to be challenging for students, but the increase in median grades reflects an increased understanding of expectations as the course progresses. The decrease in median grades for Question 6 (Final Exam) reflects the added rigor to the final exam to further ensure the integrity of the progress in view of the take home component of 4 of the 8 assessment questions.

The program could further be improved by incorporating an assessment of improvement in skills with Excel-based financial models to help analyze cases. Currently it comprises 10% of the final grade but students still require significant help with financial modelling in class. Students could also be appraised on their ability to apply strategic concepts and market-based concepts from magazine and journal articles to better understand the strategic issues that companies are facing.

Cases in Financial Management (FIN4422) students will demonstrate their ability to process financial information and to conduct a critical analysis that applies this information to financial decisions.

FIN4422 is the primary course vehicle used to ensure satisfaction of Outcome 10. FIN4422 requires students to apply the principles of, and tools developed in FIN3404 and FIN4424 to case studies of actual and fictitious companies. Students must submit a number of individually written case reports, present at least one case (either individually or in a group), and participate in discussion of cases. These activities provide opportunities for students individually and collaboratively to improve and demonstrate their ability to process financial information and conduct a critical analysis that applies this information to financial decisions. Formal and informal assessment methods (documented below) and program improvement strategies (documented below) underwrite this process.

Assessment of students will include:

- Faculty evaluation of individually written case reports on a range of financial topics for effectiveness of the tools and concepts used to analyze and resolve the issues raised by the cases. Feedback to students will minimally consist of a report grade and advice.
- Faculty evaluation of student (either individual or group) presentations of cases for effectiveness of the tools and concepts used to analyze and resolve the issues raised by the cases. Feedback to students will minimally consist of a presentation grade and advice.
- Peer assessment of student (either individual or group) presentations of cases. Peer feedback to students will minimally consist of questions, corroboration (or lack thereof) of presenter recommendations and analysis, advice and opinion arising from case discussions.

• Faculty evaluation of student (either individual or group) discussion of cases for comprehension of the effectiveness of the tools and concepts used to analyze and resolve case issues by presenters. Feedback to students will minimally consist of a discussion grade and advice.

To satisfy the requirements of FIN4422, a Finance major must demonstrate competency on the subject by earning a cumulative score of 70% or better. Students with less than 70% must retake the course. Table A3 provides assessment information for this requirement.

Table A3: Assessment Data Summary

Course	Spring 2020	Fall 2019	
Sample Size	320	320	
Test Average	90.51	89.23	
	Median	Latest	
	% correct	% correct	
Case Assignment 1	90	85	
Case Presentation	90	90	
Case Assignment 2	89	85.5	
Case Assignment 3	89	88	
Final Exam- Requires Respondus Lock-Down Browser	88	89	
Excel Crash Course	100	100	
Class participation	100	100	
Midterm		89.5	
Test average	90.51	89.23	

The data from the 8 assessment questions for Spring of 2020 (9 in Fall 2019) show a slight increase in the average percent of median correct responses of 89.23% over the Fall 2019 figure at 90.51%. This same data over time and individual assessment components in each term however indicates an increase in the knowledge base of the courses and the material tested in the questions.

Questions 1, 3 and 4, which are case reports with a 10-page minimum continue to be challenging for students, but the increase in median grades reflects an increased understanding of expectations as the course progresses. The decrease in median grades for Question 6 (Final Exam) reflects the added rigor to the final exam to further ensure the integrity of the progress in view of the take home component of 4 of the 8 assessment questions.

The program could further be improved by incorporating an assessment of improvement in skills with Excel-based financial models to help analyze cases. Currently it comprises 10% of the final grade but students still require significant help with financial modelling in class.

Students could also be appraised on their ability to apply strategic concepts and market-based concepts from magazine and journal articles to better understand the strategic issues that companies are facing.

FIN3403 Assessment Questions

- 1. You are investigating two <u>mutually exclusive</u> investment projects for the firm, project A and project B. After your analysis you find that the IRR_A>IRR_B, but that the NPV_A<NPV_B. Given this information you should:
- A. Choose neither project because of conflicting results
- B. Choose both projects as the results indicate either will work
- C. Choose B because IRR results are not conclusive with mutually exclusive projects
- D. Choose A because NPV results are not conclusive with mutually exclusive projects
- E. See if you can get a different job because you have no idea what you are doing
- 2. You borrow \$200,000 to buy a house. The mortgage rate is 4.5 percent and the loan period is 30 years, with payments made <u>monthly</u>. What is your monthly mortgage payment?
- A. \$913.37
- B. \$1013.37
- C. \$1113.37
- D. \$1213.37
- E. \$1313.37
- 3. Great Owl Corp. offers a 7.5 percent coupon bond with <u>annual payments</u>. The yield to maturity is 5 percent and the maturity date is 20 years from today. What is the market price of this bond if the face value is \$1,000?
- A. \$1011.55
- B. \$1111.55
- C. \$1211.55
- D. \$1311.55
- E. \$1411.55
- 4. Ginger Baker, Inc. just paid an annual dividend of \$3 a share and this dividend is expected to grow at a rate of 4% per year for the foreseeable future. If the discount rate for Ginger Baker is 9%, what is the current price of the stock?
- A. \$22.40
- B. \$32.40
- C. \$42.40
- D. \$52.40
- E. \$62.40
- 5. SnapDog Inc. is considering buying a new server system with an initial cost of \$4 million. The server system will have zero salvage value at the end of its 6-year life. The project will increase after tax Operating Cash Flows (OCF's) (including appropriate depreciation) to the

firm by \$1,250,000 a year, as shown in the table below. If the firm requires a 14 percent rate of return what is the Net Present Value of this project?

Year	OCF
0	-\$4,000,000
1-6	\$1,250,000

- A. -\$725,000.84
- B. -\$245,820.48
- C. \$251,860.93
- D. \$860,834.39
- E. \$981,683.39
- 6. Razor Inc needs to calculate after tax Operating Cash Flows for a new razor it is manufacturing. The upfront machinery cost is \$3,000,000 and this cost will be depreciated using straight line depreciation over the project's three-year life. The project will increase sales revenues by \$2,000,000 per year. If Razor's tax rate is 35%, what are Razor's after tax OCF's for this project over the years 1-3?
- A. \$1,250,000 per year
- B. \$1,500,000 per year
- C. \$1,650,000 per year
- D. \$1,850,000 per year
- E. \$1,950,000 per year
- 7. The risk-free rate of return is 3.9 percent and the market risk premium is 6.2 percent. What is the expected rate of return on a stock with a beta of 1.21?
- A. 10.92 percent
- B. 11.40 percent
- C. 12.22 percent
- D. 12.47 percent
- E. 12.79 percent

Appendix B: Peer/Aspirant Schools Finance Course Requirements

Florida Atlantic University (FAU): Finance Major Courses

Financial Markets and Institution	FIN4303
Investment Analysis	FIN4504
Advanced Managerial Finance	FIN4424
Cases in Financial Management	FIN4422
International Financial Management	FIN4604
Plus select one of the following:	
Financial Management of Institutions	FIN4313
Life Insurance and Pensions	RMI4116
Corporate Risk Management	RMI4353
Real Estate Finance	REE4204
Real Estate Investments	REE4303
Special Topics	FIN4934
Kennesaw University (KU): Finance Major Courses	
Corporate Finance	FIN4220
Investments	FIN4360
Choose one of the following:	
International Financial Management	FIN4420
Economic Development in Global Perspective	ECON4310
International Trade and Finance	ECON4410
2.1102.1101.01101 2.1100 0.1100	20011110
Electives	
Choose 4:	
Short Term Financial Management	FIN4260
Fixed Income Securities	FIN4320
Directed Study	FIN4400
Financial Statement Analysis	FIN4460
Special Topics in Finance	FIN4490
Financial Derivatives and Financial Engineering	FIN4520
Behavioral Finance	FIN4560
Financial Management of Financial Institutions	FIN4620
Advanced Corporate Finance	FIN4660
Principles of Risk Management and Insurance	INS4500
Deal Estate Einenes	DEE4500

Choose 1:

Real Estate Finance

Money and Financial Markets ECON4210 Directed Study ECON4400

REE4500

Microeconomics The Economics of Strategy Macroeconomics Econometrics Multivariate Data Analysis Quantitative Decision Models Decision Analysis and Simulation	ECON4510 ECON4550 ECON4610 ECON4710 ECON4750 ECON4810 ECON4850
University of Alabama Birmingham (UAB): Finance M	Iajor Courses
Intermediate Microeconomics Intermediate Macroeconomics Intro Financial Inst. & Markets Intermediate Financial Management Money & Capital Markets Investments	EC308 EC309 FI301 FI410 FI412 FI414
Financial Engineering concentration (5 courses) Required: Calculus 1 Financial Derivatives Choose 1: Corporate Financial Reporting Financial Analysis – Investing	Math 25 FI419 AC352 AC444
Choose 2: Econ Forecasting & Analysis Advanced Investment Topics Financial Econometrics Mathematical Statistics I Mathematical Statistics II	EC413 FI415 FI472 ST454 ST455
Banking & Financial Services Concentration (3 courses) Corporate Financial Reporting Fundamentals of Risk Mgt. & Insurance Bank Administration	AC352 FI341 FI421
Value Investing Concentration (3 courses) Financial Analysis – Investing Value Investing Principles Advanced Value Investing	AC444 FI417 FI418

University of Texas San Antonio (UTSA): Finance Major Courses

Intermediate Accounting for Finance	ACC3053
Intermediate Corporate Finance	FIN3023
Principles of Investment	FIN3033
Money and Banking	FIN3313
Computer Modeling of Financial Applications	FIN4873
Cases and Problems in Finance	FIN4893

Choose 3: option of Corporate Finance/Investment banking track, Investment Management Track, Financial Institutions Track.

Debt Markets	FIN3463
Derivative Markets	FIN3453
Business Finance for Entrepreneurs	FIN4333
Introduction to Risk Management	FIN4523
Introduction to International Finance	FIN4613
Independent Study	FIN4913
Internship in Finance	FIN4933
Security Analysis	FIN3423
Investment Portfolio Management	FIN4423
Intro to International Finance	FIN4613
Credit Analysis	FIN4543
Financial Institutions Management	FIN4323
Property-Liability Insurance Finance	FIN4813
Life and Health Insurance Finance	FIN4823

Georgia State University (GSU): Finance Major Courses

Fundamentals of Valuation FIN4000 (six semester hours)

Financial Analysis FIN4020

Three additional 4000-level Finance courses-suggested courses:

Corporate

Advanced Corporate Finance FIN4300
Cases and Readings in Corporate Finance FIN4320

Introduction to Derivatives FIN4200

or

Foundations of International Finance FIN4040

Financial Institutions

Financial Institutions FIN4400
The Financial System FIN4420

Introduction to Derivatives FIN4200

or

Foundations of International Finance FIN4040

or

Advanced Corporate Finance FIN4300

<u>Investments</u>

Introduction to Derivatives FIN4200 Global Portfolio Management FIN4240

Foundations of International Finance FIN4040

or

Advanced Corporate Finance FIN4300

Suggested Electives

Real Estate Finance and Mortgage Banking REE4150
Investment Property Analysis and Mortgage Banking REE4160

Texas Tech University (TTU): Finance Major Course

Intermediate Accounting I	ACCT3304
Intermediate Accounting II	ACCT3305
Financial Statement Analysis	FIN3321
Corporation Finance I	FIN3322
Introduction to Financial Markets & Institutions	FIN3323
Investments	FIN3324
Real Estate Fundamentals	FIN3332

Corporate Finance II Financial Modeling	FIN4330 FIN4331
Choose 3 electives:	
Personal Financial Management	FIN3319
Real Estate Finance	FIN3334

Any 3000 or 4000 level business course

Student Managed Investment Fund

University of South Florida (USF): Finance Major Course

Financial Modeling and Analytics	FIN4453
Principles of Investments	FIN4504
Financial Policies and Strategies	FIN4443

Electives - Students complete a Finance program of study or complete one of three (3) concentrations:

FIN4326

- Investment Analysis
- Corporate Finance
- Real Estate

Select a minimum of four of the following courses:
Financial Planning Fundamentals

Financial Planning Fundamentals	FIN3144
Money and Banking	FIN3233
International Finance	FIN3604
Personal Financial Planning Process and Development	FIN4128
Financial Institutions and Markets	FIN4303
Working Capital Management	FIN4412
Advanced Corporation Finance	FIN4414
Financial Statement Analysis	FIN4461
Advanced Investment Analysis and Management	FIN4514
Financial Option & Futures	FIN4533
Applied Securities Analysis	FIN4560
Finance Internship	FIN4940
Principles of Insurance	RMI3011
Real Estate Decision Making	REE3043
Real Estate Internship	REE4940
A (1 E' D 1 (10) (1 10	D

Any other Finance or Related Course with approval from Department Chair

Appendix C: Master of Science in Finance - Placement Rates/

Employment Profile

L Name	F Name	Company/Industry	Job Title	Graduated
Alanazi	Raed			Spring 2020
Alawad	Abdullah	Pinnacle Financial Services/ Financial Services	Pension Specialist	Spring 2020
			Trainee Consultant/	
Alismaeel	Abdulmajeed	The Consulting Co/ Consulting	MiSK Consulting Program	Fall 2020
Alshahrani	Ali			Spring 2020
Alsunaidi	Abdulaziz	Unifonic Inc./ Software and Tech Services	Accounting Officer	Spring 2019
Aronstam	Daniel	Elite Footy Tours/ Sports Hospitality	CEO	Fall 2019
		Crestmark (division of Metabank)/ Financial		- W * * * * * * * * * * * * * * * * * *
Atinsky	Rod (Darren)	Services	Jr. Field Examiner	Fall 2019
Baker	Matthew	Unified Dream/ Non-profit	Treasurer	Fall 2020
Bendeck	Elias			Fall 2020
Bucknor	Curtis	Nationwide Automotive Services/ Automobile	Data Analyst	Fall 2018
Cole	Matthew	NCCI/ Workers Compensation	Data Analyst	Spring 2019
Conatser	Andrew	NextEra Energy Resources/ Electric and Gas Utilities	Financial Analyst	Fall 2019
Costa	Mayara	Cuntes	Tindicial Tinaryst	Spring 2019
Costello	Michael			Fall 2018
Davis	James	NextEra Energy/ Electric and Gas Utilities	Financial Controller	Spring 2019
D.W.:	17.	The School District of Palm Beach County/	T. H	
DeMaria	Karina	Education	Treasurer II	Spring 2020
Dorminey	Brett	N/A	Currently Unemployed	Fall 2019
Enciso	Alejandro	Algoma Central Corporation/ Shipping	Financial Analyst	Fall 2020
Fenwick	Courtney		Financial Analyst/	Fall 2018
Frangos	Michael	Pet Supermarket/ Retail & Wholesale	FP&A	Fall 2020
Gaior	Antoine	Société Générale/ Investment Banking-Financial Services	Market Back Officer	Spring 2019
Gonzalez	Michael			Spring 2019
Guerrero	Matias	Centene Corporation/ Healthcare	Finance Manager	Fall 2018
Hardemon	Ashley	ComplyRight, Inc./ Human Resources	Financial Analyst	Spring 2020
Hein	Helia	Integrated Solutions/ Financial Services	Accounting Associate	Summer 2019
Heller	Adam	Morgan Stanley/ Financial Services	Financial Advisor	Fall 2019
Hudson-				
Vassell	Michael	T3 Trading Group, LLC/ Brokerage Services	Proprietary Trader Advising Office	Spring 2020
Humphries	Daniel	FAU	Facilitator	Fall 2020
Junqueria Hevia	Nicholas	Eland Engineering/ Consulting Services	Traffic Engineer	Fall 2018
Kunkel	Sirlei	HUVEPHARMA/ Pharmaceuticals	Finance Manager/ Controller	Spring 2020
			Associate Financial	
Kurdziel	Nicholas	Florida Power & Light Company/ Electric Utilities	Analyst	Fall 2019

Appendix C - Placement Rates/Employment Profile (Continued)

L Name	F Name	Company/Industry	Job Title	Graduated
			Chairman of the	
			Building Code	
Lynch	Edward	Palm Beach County	Advisory Board	Spring 2020
Mada	Sara			Spring 2020
M.D. I	D: :11	D 111 14/11 14	Senior Payroll	g : 2010
McDougle	Priscilla	Broward Health/ Healthcare	Processor	Spring 2019
McLay	Patrick			Fall 2018
Messner	Kyle	Northwestern Mutual/Financial Services	Financial Advisor	Fall 2020
Michel	Dieunor	Lennar/ Construction	Associate	Spring 2020
Paulone	Anthony	84 Lumber/ Building Materials and Retail	Manager-Trainee	Summer 2019
Perini	Matthew	PFT Ventures, LLC (His own business)	Business Administrator	Fall 2018
		, , ,	Analyst, Petroleum	
Petelle	James	Pilot Company/ Convenience Stores & Gas Stations	Pricing	Fall 2018
Price	Anna			Spring 2019
Qadri	Karamat	MD Now Urgent Care/ Healthcare	Financial & Business Analyst	Fall 2020
Raju	Jaison	Palm Beach County	Small Business Development Specialist	Spring 2020
Raju	Jaison	1 ann Beach County	Mergers and	Spring 2020
Rowars	Jackson	Cano Health/ Health & Wellness	Acquisitions Analyst	Fall 2020
Ruby	Alexander			Spring 2019
Ruditz	Sean	Woolbright Development/ Commercial Real Estate	?	Spring 2019
Sahel	Sylvain	FAU	Graduate Teaching Assistant	Fall 2019
Salmon	Mathieu	N/A	Currently Unemployed	Spring 2020
Samuels	Vernon	Palm Beach State College	Mathematics Instructor	Fall 2020
Souffrant	Bethsaina			Fall 2019
Tobkes	Michael	N/A	Currently Unemployed	Fall 2018
Torres	Pedro	N/A	Currently Unemployed	Spring 2019
Tsvetkov	Nikolay			Fall 2019
Uddin	Ahmed	Independent	Equity Trader	Fall 2019
Woloski	Michael	US Department of the Interior, Office of the Special Trustee	Fixed Income Financial Analyst	Fall 2019

Information as of November 30, 2020. Information not available for blue highlighted students.

Appendix D: Finance PhD Placements (since inception of program)

STUDENT	YEAR	INITIAL PLACEMENT
Bhuyan, Md Nazmul Hasan	2020	North Carolina A&T State University
Tindall, Greg	2020	Palm Beach Atlantic University
Faulkner, Matthew	2019	San Jose State University
Shelton, Austin	2019	California State University - San Bernardino
Carrete-Rodriguez, Angel	2018	Concordia College - Moorhead, Minnesota
Danso, Charles	2018	California State University - Los Angeles
Hossain, Miran	2018	University of North Carolina - Wilmington
Jansen, Benjamin	2018	Middle Tennessee State University
Kaprielyan, Margarita	2017	Elon University - North Carolina
Smith, Garrett	2015	University of Wisconsin - Whitewater
Volkov, Nikanor	2015	Mercer University - Georgia
Premti, Arjan	2014	University of Wisconsin - Whitewater
Chira, Inga	2013	Oregon State University
Coy, Jeffrey	2013	Penn State University - Erie
Marciniak, Marek	2013	West Chester University of PA
Cao, Kien	2012	Foreign Trade University, Vietnam
Smith, Deborah	2012	Cleveland State University
Davis, Sean	2011	University of North Florida
Evans, Charles	2011	Florida Atlantic University
Johnson, Will	2011	Louisiana Tech University
Susnjara, Jurica	2011	Kean University - New Jersey
Murdock, Marina	2010	University of North Georgia
Glambosky, Mina	2009	American Public University - Online Institution
Brigida, Mathew	2008	Clarion University of PA
Harris, O'Neil	2008	East Carolina University
Jory, Surendranath	2007	University of Michigan - Flint
Kaushik, Abhay	2007	Radford VA
Ngo, Thanh	2007	University of Texas - PanAmerican
Glegg, Charmaine	2006	East Carolina University
Dempere, Juan	2005	Metropolitan State College of Denver
Rotaru, Camelia	2005	St. Edwards University - Texas
Sturm, Ray	2005	University of Central Florida
Benou, Georgia	2004	BHD Bank, Dominican Republic
Richie, Nivine	2004	University of North Carolina - Wilmington
Wiggenhorn, Joan	2003	Florida Institute of Technology
Jackson, Dave	2002	University of Texas - PanAmerican
Bley, Jorg	2000	American University, Sharjah
Johnston, Jarrod	2000	Appalachian State University
Porras, Eva	2000	Instituto de Empresa, Madrid-Spain
Krishnamoorthy, Anand	1999	Troy University - Alabama
Schnusenberg, Oliver	1999	University of North Florida
Taylor, Don	1999	Penn State University - Brandywine
Schmidt (Bers), Martina	1998	University of South Florida

STUDENT	YEAR	INITIAL PLACEMENT
Larson, Stephen	1998	Ramapo College of NJ
Jones, Wesley	1997	The Citadel - South Carolina
Knight, Rainford	1997	Florida Atlantic University
Spencer, Carolyn	1996	Dowling College - Oakdale, New York
Zera, Steve	1996	California State University - San Marcos
Martin, Anna	1995	St. John's University - New York
Wright, Frank	1995	CEO NRB (National Religious Broadcasters)
Borde, Stephen	1993	University of Central Florida
Lyroudi, Katerina	1993	University of Macedonia, Thessaloniki
Picou, Armand	1992	University of Texas - Corpus Christi
Whyte, Ann Marie	1991	University of Central Florida

Appendix E: Research Databases

Note: <u>WRDS</u> (Wharton Research Data Services) – Faculty and doctoral students may obtain an account to access WRDS by contacting <u>Peter Goumas</u>. WRDS also includes a number of free databases.

Database	Description	Coverage
(Access Method)		
Audit Analytics (WRDS)	Detailed audit information on over 1,200 accounting firms and 15,000 publicly registered companies.	2000 - present
BoardEx (WRDS)	SEC filings of bankruptcy declarations The BoardEx database contains biographical information on most board members and senior executives around the world.	1999-present
Center for Monitoring the Indian Economy (CMIE) Prowess DX database (contact Anita Pennathur for further information)	23,000 medium and large firms in India and includes data on daily stock prices, annual financials, ownership, banking relationships, and reports on mergers and acquisitions for a ten year period	?
Compustat – Banking (WRDS)	Fundamental information on active and inactive U.S. and Canadian publicly held banks.	1950 - present
Compustat – Segment (WRDS)	Segment data for U.S. and Canadian publicly held companies.	1979 - present
Compustat Global (WRDS)	Financial and market data, focusing on the non-U.S. and non-Canadian marketplace.	1987 - present
Compustat North America (WRDS)	Fundamental and market information on more than 30,000 active and inactive publicly held U.S. and Canadian companies. It provides thousands of Income Statement, Balance Sheet, Statement of Cash Flows, and supplemental data items for both annual and quarterly periods.	1950 - present
CRSP – Mutual (<u>WRDS</u>)	Historical performance of open-ended mutual funds by using survivor-bias-free data.	1961 - present

Database	Description	Coverage
(Access Method)		
CRSP – Stocks (WRDS)	Comprehensive collection of security price, return, and volume data for the NYSE, AMEX and NASDAQ stock markets on a daily and monthly basis.	1925 - present
	Additional CRSP files provide stock indices, beta- and cap-based portfolios, and treasury bond and risk-free rates.	
CUSIP Master (WRDS)	Provide CUSIP numbers, standardized descriptions and additional data attributes for over 5 million corporate, municipal and government securities offered in North America	N/A
Datastream (Contact Peter Goumas for access information)	International stock price and economic data	1953 - present
Eventus (WRDS)	Performs event studies using data read directly from CRSP stock databases or pre-extracted from any source. The Eventus system includes utility programs to convert calendar dates to CRSP trading day numbers, convert CUSIP identifiers to CRSP permanent identification numbers, and extract event study cumulative or compounded abnormal returns for cross-sectional analysis.	N/A
Execucomp – S&P (WRDS)	Executive compensation data collected directly from each company's annual proxy (DEF14A SEC form). Detailed information on salary, bonus, options and stock awards, non-equity incentive plans, pensions and other compensation items are available.	1992 - present
IBES (WRDS)	Summary and individual analyst forecasts of company earnings, cash flows, and other important financial items, as well as buy-sell-hold recommendations.	1969 – present (individual data) 1974 – present (summary data)
KLD Stats (WRDS)	MSCI (formerly KLD Research & Analytics, Inc.) provides corporate social responsibility information for over 3,000 firms.	1991 - present
Morning Star (Contact Peter Goumas for access information)	Mutual Fund data including some hedge fund coverage	

Database	Description	Coverage
(Access Method)		
NAIC	Various insurance company / industry	Various
(Contact Charles Yang for	databases	
further information)		
Nastraq	Intraday trades and quotes for all Nasdaq	1999 - 2007
(WRDS)	stocks.	(no longer
		updated)
ISS (formerly RiskMetrics)	Four datasets identified roughly including	
(WRDS)	the S&P 1500 firms:	
	RiskMetrics Group Historical	1990 - 2006
	Governance	
	Historical Directors data	1996 – 2006
	 Voting Results data 	1997 - 2006
	Shareholder Proposal data	1997 - 2007