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MEMORANDUM

To: Julio Frenk, President

From: Tomás A. Salerno
Chair, Faculty Senate

Date: April 24, 2019

Subject: Faculty Senate Legislation #2018-62(B) – Revise the Degree Requirements for the Master of Science in Finance Degree Program (MSF), Business School

The Faculty Senate, at its April 17, 2019 meeting, had no objections to the proposal from the Business School to revise the on-campus degree requirements for the Master of Science in Finance degree program. These changes do not affect the online MSF program. Details are included in the proposal materials enclosed.

The Faculty Senate does not approve budget concepts, therefore no budget information is included here.


This legislation is now forwarded to you for your action.

TAS/rh

Enclosure

cc: Jeffrey Duerk, Provost and Executive Vice President for Academic Affairs
John Quelch, Dean, Business School
Guillermo Prado, Dean, Graduate School
Michael Fuerst, Associate Professor of Professional Practice, Business School
Lorenzo Naranjo, Assistant Professor of Professional Practice, Business School

CAPSULE: Legislation #2018-62(B) – Revise the Degree Requirements for the Master of Science in Finance Degree Program (MSF), Business School

APPROVED:  DATE: 5/9/19
(President's Signature) Dean John Quelch and
OFFICE OR INDIVIDUAL TO IMPLEMENT: Dean Guillermo Prado
EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY
(pending any additional approval by the Board of Trustees)
NOT APPROVED AND REFERRED TO: _____
REMARKS (IF NOT APPROVED): _____



Proposal Submission Checklist

Proposals are to be submitted to the Office of Assessment and Accreditation (OAA), if applicable, the Graduate Council (for graduate programs excluding Law and Medical), if applicable, and the Faculty Senate. Refer to the [Procedures for Program Changes](#) document for information on the approvals and notifications needed for program changes and the [Proposal Submissions Specifications](#) document for an explanation of the process and a list of the materials required.

(Please note that change approvals can take 2 semesters to complete.)

FORM INSTRUCTIONS:

1. Save/download the form as a pdf.
2. After completing the information below, print and scan the form.
3. Insert it with the background materials that are specified, in the order listed, and submit to facsen@miami.edu.

Please note: only scanned versions can be accepted.

Include this checklist at the beginning of each proposal.

KEY CONTACT PERSONNEL INFORMATION

First Name

Michael/Lorenzo

Last Name

Fuerst/Naranjo

Proponent's Title

Associate Professor of Professional
Practice/Assistant Professor of

Department, if applicable

Finance

School/College

Miami Business School

E-mail

mfuerst@bus.miami.edu/lnaranjo@

Phone

305-284-5289/305-284-94

Title of Proposal

Master of Science in Finance Curriculum and Credit Change

(-continue to next page-)

MANDATORY MEMORANDA AND FORMAT

Please check that each item listed below is included in the proposal package of materials, in the ORDER as listed. The applicable title (i.e. Letter of Explanation, Memo from the Dean, etc.) is to precede each section in the materials.

Only proposals conforming to this format will be accepted.

1. This completed checklist.

2. Letter of explanation. (2-3 pages only, double spaced, 12 pt font)

Yes No

If no, explain why:

3. A memo from the dean(s) signifying approval of the faculty of the relevant School(s) / Colleges(s).

Yes No

If no, explain why:

4. A memo that all affected or relevant School / College Council(s) have approved.

Yes No

If no, explain why:

5. A memo from the department chair(s) signifying approval of the faculty of the relevant department(s).

Yes No

If no, explain why: -

6. A memo from the Office of Accreditation and Assessment (OAA) if the proposal involves academic programs (degrees, certificates, majors, minors, concentrations, specializations, tracks, etc.) such as new programs, closing programs, or program changes (such as changes in requirements, program length, modality, name, location).

(To be submitted by OAA to the Graduate Council or the Faculty Senate, as appropriate.)

Applicable Not applicable.

If not, explain why:

7. A memo from the Graduate School Dean signifying approval of the Graduate Council (for graduate programs only).

(To be submitted to the Faculty Senate by the Graduate Council.)

Applicable Not applicable.

If not, explain why:

8. Academic Deans Policy Council (ADPC) approval, for interdisciplinary issues and as appropriate. Please consult with the Dean of the Graduate School or the Secretary of the Faculty Senate to check if this is needed.

Yes No

If no, explain why:

Not an interdisciplinary issue.

9. Additional required documents as listed on the "Proposal Submissions Specifications," i.e. market analysis, budget information, assessment of library collections, etc. as specified.

List additional documents included:

End form.



MEMORANDUM

TO: General Welfare Committee
Faculty Senate

FROM: Patricia Sánchez Abril, J.D., Vice Dean, Graduate Business Education
Michael Fuerst, Ph.D., Associate Professor of Professional Practice in Finance,
Faculty Director, Master of Science in Finance
Lorenzo Naranjo, Ph.D., Associate Professor of Professional Practice in
Finance, Faculty Director, Master of Science in Finance

Subject: Curriculum and Credit Change: Master of Science in Finance

Date: April 1, 2019

Proposal: To update the curriculum and credits for the Master of Science in Finance. (See attached proposal by Drs. Michael Fuerst and Lorenzo Naranjo for details.)

Background: The Master of Science in Finance seeks to update its curriculum resulting in a minor credit change.

Reasoning:

- See attached proposal for details on specific reasoning.

Resource Implications: None.

Procedural History:

- Graduate Business Education Committee – Discussed and approved 10/9/2018
- School Council of the Miami Business School – Discussed and approved 10/19/2018
- Graduate Council – Discussed and approved 3/19/2018



MEMORANDUM

To: General Welfare Committee
Faculty Senate

From: Michael Fuerst and Lorenzo Naranjo
Faculty Directors of MSF Programs

Cc: Alexander Mas, Assistant Director Programs
Alok Kumar, Chair-Finance Department

Date: April 1, 2019

Subject: Curriculum Change Proposal for Master of Science in Finance Program

Procedural History

The current proposal was voted on and approved unanimously by the department of finance on September 7, 2018. Subsequently, the proposal was presented before and approved by the Graduate Business Education Committee on October 9, 2018, and again presented before and approved by the School Council of the Miami Business School on October 19, 2018. The Graduate Council approved the proposal on March 19, 2018.

Rationale for the Curriculum Change

We propose to modify the existing curriculum of the Master of Science in Finance (MSF) program in response to new market demands. Students and their potential employers now require preparation for a more diverse set of careers. The current curriculum is structured around two preset tracks that provide a relatively narrow and inflexible educational path that is now often inconsistent with student interests and employer demands. This proposed change in the current curriculum would give students more flexibility to align their coursework with their career interests and would align our MSF program offerings with other competing institutions.¹

Nevertheless, the proposed curriculum defines a common core of required courses and organizes elective courses into advisory clusters that align with student career objectives. The set of clusters includes those that prepare students for the standard fields of finance such as investments and corporate finance. In response to market demands, however, the proposed curriculum also creates

¹¹ For example, University of Southern California-Marshall promotes, "flexibility to pursue individual interests." MIT-Sloan offers "several interdepartment[al] elective options" and advertises the degree "enables you to build a program specific to your requirements." Babson College promotes its program's "uncommon flexibility" and advertises "Half the MSF credits are electives, allowing you to tailor your learning to your specific career interests." London Business School also emphasizes its program's "flexibility and customi[z]ation" and advertises, "Tailor the [program] for your career goals" and "choose a specialist study route that prepares you for a specific career path."

course clusters in fintech, the psychology of markets, quantitative finance, and other modern areas of finance in which employers require education.

Additional small changes align the proposed curriculum with other master's programs at Miami Business School, for example, by requiring BUS 610 Critical Thinking and Persuasion for Business as a replacement for separate courses in speaking, writing, and career development.

Please Note: The proposed curriculum change applies to the traditional format of the Master of Science in Finance program (academic plan code: FINL_MSF), not to the online format (academic plan code: OFIN_MSF)

Current Curriculum Requirements

The current curriculum defines two tracks and gives students the possibility of choosing only one elective. Please see Appendix I for a description of these tracks.

Proposed New Curriculum

Courses and Course Selection

The proposed new curriculum defines a common core of required courses (14 credits) and allows the selection of elective courses (20 credits) from the list below (or other relevant courses if approved by the faculty director). A minimum of 12 elective credits out of the 20 total elective credits must be finance (FIN) courses. A minimum of 24 STEM credits (12 required and 12 elective) out of 34 total program credits is required for graduation. All courses available as electives are currently taught as part of the MSF, MBA or graduate programs in general.

In addition, elective courses shall be selected with the advice and approval of the faculty director such that the electives constitute an advisory cluster aligned with a student's specific career objectives. Please see Appendix II for example advisory clusters.

Required STEM Courses

| | | |
|--------------------|------------------------------------------------------|---|
| BUS 640 | Quantitative and Analytical Fundamentals for Finance | 4 |
| FIN 650 | Financial Investment | 2 |
| FIN 670 | Corporate Finance | 2 |
| FIN 683 | Financial Modeling | 2 |
| FIN 695 or FIN 696 | Finance Internship or Finance Capstone Project | 2 |

Other Required Courses

| | | |
|---------|-----------------------------------------------|---|
| BUS 610 | Critical Thinking and Persuasion for Business | 2 |
|---------|-----------------------------------------------|---|

Finance STEM Electives

| | | |
|---------|------------------------------------------------|---|
| FIN 643 | Quantitative Finance and Market Microstructure | 2 |
| FIN 644 | Real Estate Investment and Appraisal | 2 |
| FIN 645 | Real Estate Finance | 2 |
| FIN 646 | Real Estate Market Analysis | 2 |
| FIN 647 | Introduction to ARGUS | 1 |
| FIN 648 | Advanced ARGUS | 1 |

| | | |
|-----------------------------|-------------------------------------------------------|-----------|
| FIN 651 | Advanced Topics in Investments | 2 |
| FIN 652 | Fixed Income Securities | 2 |
| FIN 653 | Alternative Investments | 2 |
| FIN 654 | Impact Investing | 2 |
| FIN 655/656 | Smif Fund Analyst I/II | 2 |
| FIN 657/658 | Smif Fund Portfolio Manager I/II | 2 |
| FIN 660 | International Finance | 2 |
| FIN 661 | Advanced International Finance | 2 |
| FIN 668 | Wealth Management and Financial Planning | 2 |
| FIN 671 | Advanced Topics in Corporate Finance | 2 |
| FIN 672 | Sustainable Finance | 2 |
| FIN 674 | Financial Analysis of Mergers and Acquisitions | 2 |
| FIN 679 | Private Equity and Venture Capital | 2 |
| FIN 680 | FinTech | 2 |
| FIN 681 | Financial Institutions | 2 |
| FIN 685 | Mathematics of Financial Derivatives | 2 |
| FIN 686 | Financial Decision Making | 2 |
| FIN 698 | Selected Topics in Finance | 2 |
| Other STEM Electives | | |
| ECO 685 | Managerial Decisions in a Global Economy | 2 |
| ECO 695 | Global Economics | 2 |
| MAS 627 | Programming for Data Analytics | 2 |
| MAS 637 | Applied Regression Analysis and Forecasting | 2 |
| MAS 640 | Applied Time Series Analysis and Forecasting | 2 |
| MTH 647 | Introduction to Mathematical Finance | 3 |
| MTH 648 | Stochastic Calculus with Applications to Finance | 3 |
| MTH 649 | Computational Methods of Finance | 3 |
| Other Electives | | |
| ACC 628 | Introduction to Accounting Analytics | 2 |
| ACC 670 | Financial Reporting and Analysis | 2 |
| ACC 672 | Advanced Financial Analysis | 2 |
| BSL 691 | The Public Corporation: Legal Perspectives | 2 |
| BSL 694 | Real Estate Law | 2 |
| MGT 621 | High Performance Leadership | 2 |
| RED 660 | Urban Infill, Preservation, and Mixed Use Development | 2 |
| Total Credit Hours | | 34 |

Notes:

1. Students who enrolled and obtained a grade B or higher in FIN 405 will have FIN 683 replaced by an elective approved by the program director.

Internship and Capstone Project

The new curriculum includes a mandatory Finance Internship (FIN 695) or Finance Capstone Project (FIN 696). Several related master's programs require or promote their students' internships, practicums, or capstone projects.²

In addition, the proposed curriculum's internship/capstone requirement has been coordinated with the Department of International Student and Scholar Services (ISSS) at the University and the following language has been developed such that the curriculum is in compliance with U.S. Citizenship and Immigration Services (USCIS):

One semester of part-time (10-20 hours per week) practical training and concurrent enrollment in FIN 695 or FIN 696 is mandatory for the MSF degree. Practical training is defined as "alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school." The practical training and concurrent enrollment in FIN 695 or FIN 696 must be approved in advance by the faculty director. International students in F-1 status are required to obtain authorization for Curricular Practical Training (CPT) from the Department of International Student and Scholar Services (ISSS) prior to engaging in off-campus employment.

ISSS asks that this language be included in the University Bulletin.

Program and Student Learning Outcomes

Student Learning Outcomes (SLOs)

Student learning outcomes have been adjusted to take advantage of the experiential learning opportunities afforded by the Finance Internship (FIN 695) or Finance Capstone Project (FIN 696). Please find the current curriculum's Student Learning Outcome (SLOs) described in Appendix III. In Appendix IV, please find the SLOs for the new proposed curriculum.

Program Outcomes

Program outcomes are not altered by the proposed curriculum change. Please find the program outcomes in Appendix V.

² For example, Duke University-Fuqua, MIT-Sloan, Washington University St. Louis, University of Connecticut, University of California-Irvine, University of Maryland - College Park (Smith), and New York University-Stern.

Appendix I: Current Curriculum Tracks

Current Curriculum Requirements – Corporate Track

| | | |
|------------------------|----------------------------------------------------------------------------------------------------|----|
| Fall Semester-Term 1 | | |
| BSL 691 | The Public Corporation: Legal Perspectives | 2 |
| BUS 600 or BUS 602 | Fundamentals of Critical Thinking and Effective Writing Critical Thinking and Effective Writing | 1 |
| BUS 604 | Career Development and Enrichment | 0 |
| BUS 640 | Quantitative and Analytical Fundamentals for Finance | 4 |
| FIN 650 | Financial Investment | 2 |
| FIN 670 | Corporate Finance | 2 |
| Fall Semester-Term 2 | | |
| ACC 672 | Advanced Financial Analysis | 2 |
| BUS 603 | Critical Thinking and Effective Speaking | 1 |
| FIN 643 | Quantitative Finance and Market Microstructure | 2 |
| FIN 686 | Financial Decision Making | 2 |
| Spring Semester-Term 1 | | |
| BUS 604 | Career Development and Enrichment | 1 |
| FIN 674 | Financial Analysis of Mergers and Acquisitions | 2 |
| FIN 679 | Private Equity and Venture Capital | 2 |
| FIN 685 | Mathematics of Financial Derivatives | 2 |
| Elective | | 2 |
| Spring Semester-Term 2 | | |
| FIN 652 | Fixed Income Securities | 2 |
| FIN 671 | Advanced Topics in Corporate Finance | 2 |
| FIN 681 | Financial Institutions | 2 |
| FIN 683 | Financial Modeling | 2 |
| Total Credit Hours | | 35 |

Current Curriculum Requirements – Investments Track

Fall Semester-Term 1

| | | |
|------------|---------------------------------------------------------|---|
| BUS 600 | Fundamentals of Critical Thinking and Effective Writing | 1 |
| or BUS 602 | Critical Thinking and Effective Writing | |
| BUS 604 | Career Development and Enrichment | 0 |
| BUS 640 | Quantitative and Analytical Fundamentals for Finance | 4 |
| FIN 650 | Financial Investment | 2 |
| FIN 660 | International Finance | 2 |
| FIN 670 | Corporate Finance | 2 |

Fall Semester-Term 2

| | | |
|---------|------------------------------------------------|---|
| ACC 672 | Advanced Financial Analysis | 2 |
| BUS 603 | Critical Thinking and Effective Speaking | 1 |
| FIN 643 | Quantitative Finance and Market Microstructure | 2 |
| FIN 686 | Financial Decision Making | 2 |

Spring Semester-Term 1

| | | |
|----------|------------------------------------------------|---|
| BUS 604 | Career Development and Enrichment | 1 |
| FIN 651 | Advanced Topics in Investments | 2 |
| FIN 674 | Financial Analysis of Mergers and Acquisitions | 2 |
| FIN 685 | Mathematics of Financial Derivatives | 2 |
| Elective | | 2 |

Spring Semester-Term 2

| | | |
|--------------------|-------------------------|----|
| FIN 652 | Fixed Income Securities | 2 |
| FIN 653 | Alternative Investments | 2 |
| FIN 681 | Financial Institutions | 2 |
| FIN 683 | Financial Modeling | 2 |
| Total Credit Hours | | 35 |

Appendix II: Example Advisory Clusters in the Proposed Curriculum

Example Cluster for a Corporate Finance Career Objective

| | | | |
|-------------------------------|----------------------------------------------------------------|--|-----------|
| Pre-Term Boot Camp | | | |
| BUS 640 | Quantitative and Analytical Fundamentals for Finance | | 4 |
| Fall Semester-Term 1 | | | |
| BUS 610 | Critical Thinking and Persuasion for Business | | 2 |
| FIN 650 | Financial Investment | | 2 |
| FIN 670 | Corporate Finance | | 2 |
| FIN 643 | Quantitative Finance and Market Microstructure | | 2 |
| Fall Semester-Term 2 | | | |
| ACC 672 | Advanced Financial Analysis | | 2 |
| FIN 660 | International Finance | | 2 |
| FIN 683 | Financial Modeling | | 2 |
| FIN 685 | Mathematics of Financial Derivatives | | 2 |
| Spring Semester-Term 1 | | | |
| FIN 674 | Financial Analysis of Mergers and Acquisitions | | 2 |
| FIN 679 | Private Equity and Venture Capital | | 2 |
| FIN 686 | Financial Decision Making | | 2 |
| FIN695/FIN696 | Finance Internship/Capstone Project (full semester, 2 credits) | | 1 |
| Spring Semester-Term 2 | | | |
| FIN 652 | Fixed Income Securities | | 2 |
| FIN 671 | Advanced Topics in Corporate Finance | | 2 |
| FIN 681 | Financial Institutions | | 2 |
| FIN695/FIN696 | Finance Internship/Capstone Project (full semester, 2 credits) | | 1 |
| Total Credit Hours | | | 34 |

Example Cluster for an Investments Career Objective

| | | |
|-------------------------------|----------------------------------------------------------------|-----------|
| Pre-Term Boot Camp | | |
| BUS 640 | Quantitative and Analytical Fundamentals for Finance | 4 |
| Fall Semester-Term 1 | | |
| BUS 610 | Critical Thinking and Persuasion for Business | 2 |
| FIN 650 | Financial Investment | 2 |
| FIN 670 | Corporate Finance | 2 |
| FIN 643 | Quantitative Finance and Market Microstructure | 2 |
| Fall Semester-Term 2 | | |
| ACC 672 | Advanced Financial Analysis | 2 |
| FIN 660 | International Finance | 2 |
| FIN 683 | Financial Modeling | 2 |
| FIN 685 | Mathematics of Financial Derivatives | 2 |
| Spring Semester-Term 1 | | |
| FIN 651 | Advanced Topics in Investments | 2 |
| FIN 668 | Wealth Management and Financial Planning | 2 |
| FIN 686 | Financial Decision Making | 2 |
| FIN695/FIN696 | Finance Internship/Capstone Project (full semester, 2 credits) | 1 |
| Spring Semester-Term 2 | | |
| FIN 653 | Alternative Investments | 2 |
| FIN 652 | Fixed Income Securities | 2 |
| FIN 681 | Financial Institutions | 2 |
| FIN695/FIN696 | Finance Internship/Capstone Project (full semester, 2 credits) | 1 |
| Total Credit Hours | | 34 |

Appendix III: Current Curriculum Student Learning Outcomes (SLOs)

SLO 1

Students will acquire the ability to apply appropriate analytical and quantitative models to a wide assortment of decisions encountered by finance professionals.

Measure Type and Method: A spreadsheet-based portfolio project in FIN 683 (Financial Modeling) which involves calculating various portfolio statistics, determining the investment weights in a portfolio's assets to meet various risk and return goals, and plotting the investment opportunity set.

Scoring, Scale or Calculation: 1: Poor: Clearly lacks sufficient understanding and ability to apply appropriate analytical and quantitative models.

2: Some level of understanding and ability to apply appropriate analytical and quantitative models, but does not demonstrate an acceptable level of demonstrated understanding and ability.

3: Acceptable: Multiple weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, but an acceptable level of demonstrated understanding and ability overall.

4: Some small weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, but good level of demonstrated understanding and ability overall.

5: Excellent: No or only a very minor weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, with a high level of demonstrated understanding and ability overall.

Annual Target: 90% of students will perform at an acceptable or higher level on the rubric.

SLO 2

Students will acquire the ability to integrate the financial concepts important to their chosen field of specialty in finance, as defined by their curriculum track of study in the program.

Measure Type and Method: Assignments are based on the track...there are two beginning with the 2017-2018 year: Corporate Finance and Investments. For students in the Investments track this is an assignment in FIN 651 ("Advanced Topics in Investments", offered in Spring Term 1) in which students analyze client dollar inflows/outflows to calculate returns and various performance statistics. For students in the

Corporate Finance track this will be an exam question in FIN 671 ("Advanced Topics in Corporate Finance", offered in Spring Term 2) that invokes the put-call-parity theorem.

Scoring, Scale or Calculation:

1. Poor: Clearly lacks sufficient ability to integrate the financial concepts important to the chosen field of specialty as defined by the choice of curriculum track of study.

2: Some level of ability to integrate the financial concepts important to the chosen field of specialty as defined by the choice of curriculum track of study, but does not demonstrate an acceptable level of ability to integrate the relevant financial concepts.

3: Acceptable: Multiple weaknesses shown in the ability to integrate the financial concepts important to the chosen field of specialty as defined by the choice of curriculum track of study, but an acceptable or higher level of ability to integrate the relevant financial concepts.

4: Some small weaknesses shown in the ability to integrate the financial concepts important to the chosen field of specialty as defined by the choice of curriculum track of study, with a good level of ability to integrate the relevant financial concepts overall.

5: Excellent: No or only a very minor weaknesses shown in the ability to integrate the financial concepts important to the chosen field of specialty as defined by the choice of curriculum track of study, with a high level of ability overall.

Annual Target:

90% of students will perform at an acceptable or higher level on the rubric.

SLO 3

Students will acquire the ability to write effectively in order to excel as a professional in the field of finance.

Measure Type and Method:

A writing assignment given in FIN 643 ("Quantitative Finance and Market Microstructure", offered in Fall Term 2) will be used to assess this outcome.

Scoring, Scale or Calculation:

1: Poor: Clearly lacks the ability to write effectively in order to excel as a professional in the field of finance.

2: Some level of ability to write effectively in order to excel as a professional in the field of finance, but does not demonstrate an acceptable level of ability overall.

3: Acceptable: Multiple weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates an acceptable ability overall.

4: Some small weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates a higher than acceptable ability overall.

5: Excellent: No or only a very minor weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates a strong ability overall.

Annual Target:

90% of students will perform at an acceptable or higher level on the rubric.

Appendix IV: Proposed Curriculum Student Learning Outcomes (SLOs)

SLO 1

Please Note: these SLO 1 is not altered by the proposed curriculum change.

Students will acquire the ability to apply appropriate analytical and quantitative models to a wide assortment of decisions encountered by finance professionals.

| | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measure Type and Method: | A spreadsheet-based portfolio project in FIN 683 (Financial Modeling) which involves calculating various portfolio statistics, determining the investment weights in a portfolio's assets to meet various risk and return goals, and plotting the investment opportunity set. |
| Scoring, Scale or Calculation: | 1: Poor: Clearly lacks sufficient understanding and ability to apply appropriate analytical and quantitative models. 2: Some level of understanding and ability to apply appropriate analytical and quantitative models, but does not demonstrate an acceptable level of demonstrated understanding and ability. 3: Acceptable: Multiple weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, but an acceptable level of demonstrated understanding and ability overall. 4: Some small weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, but good level of demonstrated understanding and ability overall. 5: Excellent: No or only a very minor weaknesses shown in the level of understanding and ability to apply appropriate analytical and quantitative models, with a high level of demonstrated understanding and ability overall. |
| Annual Target: | 90% of students will perform at an acceptable or higher level on the rubric. |

SLO 2

Students will apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty, as defined by their Finance Internship (FIN 695) or Finance Capstone Project (FIN 696), in the solution of real-world problems.

| | |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measure Type and Method: | Students will identify specific examples of their application of financial concepts and quantitative and analytical techniques in the course of their Finance Internship (FIN 695) or Finance Capstone |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Project (FIN 696) and indicate how the application of those concepts and techniques improved the effectiveness, efficiency, or performance of their assigned firm or organization. These examples and the resulting improvements will be reviewed, assessed, and scored jointly by the faculty advisor and the student's manager/client at the assigned firm/organization.

Scoring, Scale or Calculation:

1. Poor: Clearly lacks sufficient ability to apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty in the solution of real-world problems.

2: Demonstrates some level of ability to apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty in the solution of real-world problems, but does not demonstrate an acceptable level of this ability overall.

3: Acceptable: Shows multiple weaknesses in the ability to apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty in the solution of real-world problems, but demonstrates an acceptable level of this ability overall.

4: Shows some small weaknesses in the ability to apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty in the solution of real-world problems, but demonstrates a higher than acceptable level of this ability overall.

5: Excellent: Shows no or only very minor weaknesses in the ability to apply the financial concepts and quantitative and analytical techniques important to their chosen field of specialty in the solution of real-world problems, and demonstrates a strong level of this ability overall.

Annual Target:

90% of students will perform at an acceptable or higher level on the rubric.

SLO 3

Students will acquire the ability to write effectively in order to excel as a professional in the field of finance.

Measure Type and Method:

A writing assignment given in FIN 643 ("Quantitative Finance and Market Microstructure", offered in Fall Term 2) or an equivalent substitute course with prior approval of the faculty director will be used to assess this outcome.

Scoring, Scale or Calculation:

1: Poor: Clearly lacks the ability to write effectively in order to excel as a professional in the field of finance.

2: Some level of ability to write effectively in order to excel as a professional in the field of finance, but does not demonstrate an acceptable level of ability overall.

3: Acceptable: Multiple weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates an acceptable ability overall.

4: Some small weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates a higher than acceptable ability overall.

5: Excellent: No or only a very minor weaknesses shown in the ability to write effectively in order to excel as a professional in the field of finance, but demonstrates a strong ability overall.

Annual Target:

90% of students will perform at an acceptable or higher level on the rubric.

Appendix V: Program Outcomes

Please Note: these program outcomes are not altered by the proposed curriculum change.

UM Mission Statement (stated here for convenience)

To educate and nurture students, to create knowledge, and to provide service to our community and beyond. Committed to excellence and proud of the diversity of our University family, we strive to develop future leaders of our nation and the world.

School of Business Mission Statement (stated here for convenience)

To develop innovative ideas and principled leaders that transform global business and society.

Program Outcome

The program objectives of our full-time MSF program are derived from the UM and School's mission statements above. After graduation, our MSF alumni should be prepared to assume leadership role in their professional career, and able to make an impact on their business community and society..


To achieve these objectives, the students should be successful in their academic program and feel satisfied with the quality of the education they received in the program.

- Program Objective 1: 90% (or more) Graduation rate
- Program Objective 2: 90% (or more) of surveyed students somewhat agree, agree, or strongly



MEMORANDUM

TO: General Welfare Committee
Faculty Senate

FROM: W. Brian Barrett, Speaker of the School Council 
Anita Cava, Professor, Business Law, Second Vice Chair, School Council
Shirley Dennis-Escoffier, Associate Professor, Accounting,
First Vice Chair, School Council
Howard Gitlow, Professor, Management Science
Karoline Mortensen, Associate Professor, Health Management and Policy
A. Parasuraman, James W. McLamore Chair and Professor, Marketing
Philip Robins, Professor, Economics
Sara Rushinek, Professor, Business Technology
Chester A. Schriesheim, Professor, Management

Subject: Curriculum and Credit Change: Master of Science in Finance

Date: October 26, 2018

The School Council, at its October 19 meeting, voted unanimously to approve the curriculum and credit change for the Master of Science in Finance degree program.

Please note that the voting members of the Miami Business School (MBS), the regular faculty per the MBS bylaws, voted to delegate all decisions on curriculum issues to their elected representatives on the School Council for the fall 2018-spring 2019 academic year.



MEMORANDUM

TO: General Welfare Committee
Faculty Senate

FROM: John Quelch, Dean, Miami Business School *John Quelch*

Subject: Support for the Master of Science in Finance Curriculum and Credit Change

Date: November 30, 2018

This memo is to document my support for the proposed curriculum and credit change in the Master of Science in Finance program.

Thank you.



Office of Planning,
Institutional Research,
and Assessment

P.O. Box 248285
Coral Gables, FL 33124-2923
Phone: 305-284-3856

Gables One Tower, Suite 260, Locator 2923
1320 S. Dixie Hwy., Coral Gables, FL 33146
Fax: 305-284-4081 • pira@miami.edu

MEMORANDUM

DATE: February 4, 2019

TO: Michael Fuerst and Lorenzo Naranjo, Department of Finance
Miami Business School

FROM: Patty Murphy, Associate Provost for University Accreditation
Office of Assessment and Accreditation

RE: Revision of Degree Requirements for the MSF Program

PBM

On February 3, 2019, the Miami Business School notified my office of its intent to revise the degree requirements for the on-campus Master of Science in Finance degree program (Academic Plan Code: FINL_MSF). (NOTE: These changes will not affect the online MSF program.) The current curriculum has two tracks that will be discontinued (Corporate track and Investments track). (NOTE: These tracks do not have academic plan codes.) These changes are being made to meet employer and student demand for the program to prepare students for a wider range of careers.

The proposed new requirements would provide students with greater flexibility to tailor their program to their desired career path while maintaining a strong finance and STEM foundation. In consultation with their faculty advisor, students will pursue a curriculum that best suits their desired career path. Program faculty will develop informal clusters of courses appropriate to specific career paths to provide additional guidance to students.

The proposed changes will reduce the length of the program slightly from 35 to 34 credit hours. The revised curriculum will include 14 credit hours in required core courses, including a required internship or capstone project, and 20 credit hours in approved electives. A minimum of 12 credit hours of electives must be in Finance. Overall, a minimum of 24 credit hours must be in the approved STEM courses listed below (12 required and 12 electives). The full curriculum is shown below:

- Core Courses (Required)
 - STEM courses (12 credit hours)
 - BUS 640 Quantitative and Analytical Fundamentals for Finance (4 credit hours)
 - FIN 650 Financial Investment (2 credit hours)
 - FIN 670 Corporate Finance (2 credit hours)
 - FIN 683 Financial Modeling (2 credit hours)
 - FIN 695 Finance Internship (2 credit hours) OR FIN 696 Finance Capstone Project (2 credit hours)
 - BUS 610 Critical Thinking and Persuasion for Business (2 credit hours)
- Approved Electives (Students will complete 20 credit hours from the following options.)
 - Finance STEM electives (a minimum of 12 credit hours)

- FIN 643 Quantitative Finance and Market Microstructure (2 credit hours)
- FIN 644 Real Estate Investment and Appraisal (2 credit hours)
- FIN 645 Real Estate Finance (2 credit hours)
- FIN 646 Real Estate Market Analysis (2 credit hours)
- FIN 647 Introduction to ARGUS (1 credit hour)
- FIN 648 Advanced ARGUS (1 credit hour)
- FIN 651 Advanced Topics in Investments (2 credit hours)
- FIN 652 Fixed Income Securities (2 credit hours)
- FIN 653 Alternative Investments (2 credit hours)
- FIN 654 Impact Investing (2 credit hours)
- FIN 655 Smif Fund Analyst I (2 credit hours)
- FIN 656 Smif Fund Analyst II (2 credit hours)
- FIN 657 Smif Fund Portfolio Manager I (2 credit hours)
- FIN 658 Smif Fund Portfolio Manager II (2 credit hours)
- FIN 660 International Finance (2 credit hours)
- FIN 661 Advanced International Finance (2 credit hours)
- FIN 668 Wealth Management and Financial Planning (2 credit hours)
- FIN 671 Advanced Topics in Corporate Finance (2 credit hours)
- FIN 672 Sustainable Finance (2 credit hours)
- FIN 674 Financial Analysis of Mergers and Acquisitions (2 credit hours)
- FIN 679 Private Equity and Venture Capital (2 credit hours)
- FIN 680 FinTech (2 credit hours)
- FIN 681 Financial Institutions (2 credit hours)
- FIN 685 Mathematics of Financial Derivatives (2 credit hours)
- FIN 686 Financial Decision Making (2 credit hours)
- FIN 698 Selected Topics in Finance (2 credit hours)
- Other STEM electives
 - ECO 685 Managerial Decisions in a Global Economy (2 credit hours)
 - ECO 695 Global Economics (2 credit hours)
 - MAS 627 Programming for Data Analytics (2 credit hours)
 - (2 credit hours)
 - MAS 637 Applied Regression Analysis and Forecasting (2 credit hours)
 - MAS 640 Applied Time Series Analysis and Forecasting (2 credit hours)
 - MTH 647 Introduction to Mathematical Finance (3 credit hours)
 - MTH 648 Stochastic Calculus with Applications to Finance (3 credit hours)
 - MTH 649 Computational Methods of Finance (3 credit hours)
- Other electives
 - ACC 628 Introduction to Accounting Analytics (2 credit hours)
 - ACC 670 Financial Reporting and Analysis (2 credit hours)
 - ACC 672 Advanced Financial Analysis (2 credit hours)
 - BSL 691 The Public Corporation: Legal Perspectives (2 credit hours)
 - BSL 694 Real Estate Law (2 credit hours)
 - MGT 621 High Performance Leadership (2 credit hours)
 - RED 660 Urban Infill, Preservation, and Mixed Use Development (2 credit hours)

The proposed changes will not affect the program's CIP code, **27.0305 Financial Mathematics**, because the majority of the degree still meets the CIP code definition.

The proposed changes do not "represent a significant departure, either in content or method of delivery" from what we are currently approved by SACSCOC to offer due to the following:

- The proposed changes meet the SACSCOC requirement of a minimum of 30 credit hours for a graduate program.
- The proposed changes do not require the development of new courses. It is merely a repackaging of existing courses.
- The proposed changes will not require the hiring of new faculty.
- The majority of the program will not be offered via distance education and, in any case, the University is approved to offer 100% distance education programs.
- The program will be offered on the University's Coral Gables campus.
- The graduate program covers the literature in the field through its required core coursework.
- The graduate program ensures ongoing student engagement in research and/or appropriate professional practice and training experiences through a required internship (FIN 695) or capstone project (FIN 696).

SACSCOC only requires notification of program changes that represent a significant departure from our current programs. Therefore, no notification or approval is required for this change.

Please contact me if you have any questions at pattymurphy@miami.edu or (305) 284-3276.

CC: Faculty Senate
Guillermo Prado, Dean of the Graduate School
John Quelch, Dean of the Miami Business School
Patricia Abril, Vice Dean, Miami Business School
Alex Mas, Assistant Director, Miami Business School
Alok Kumar, Department of Finance Chair, Miami Business School
Karen Beckett, University Registrar
Carrie Glass, Executive Director of Student Financial Assistance and Employment

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MEMORANDUM

DATE: April 1, 2019

TO: Tomas Salerno Chair,
Faculty Senate

FROM: Guillermo (Willy) Prado 
Dean, Graduate School

SUBJECT: Proposal – Curriculum and Credit Change in the Master of Science in Finance

The Miami Business School submitted a request to update the curriculum and credits for the Master of Science in Finance. The proposal was discussed at the meeting of the Graduate Council on Tuesday, March 19, 2019, and no concerns were expressed by the Council members.

CC: John Quelch, Dean, Miami Business School
Patricia Sánchez Abril, Vice Dean, Graduate Business Education
Michael Fuerst, Associate Professor of Professional Practice in Finance, Faculty
Director, Master of Science in Finance
Lorenzo Naranjo, Associate Professor of Professional Practice in Finance,
Faculty Director, Master of Science in Finance
Alexander Mas, Assistant Director Programs
Tiffany Plantan, Director of Education, Graduate School
Patty Murphy, Associate Provost for University Accreditation, Office of
Assessment and Accreditation