

## UMBC UGC New Course Request: FINC 300 Financial Markets and Analysis

Date Submitted: 9/15/2018

Proposed Effective Date: Immediate

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### COURSE INFORMATION:

Course Number(s)	FINC 300
Formal Title	Financial Markets and Analysis
Transcript Title (≤30c)	Financial Markets and Analysis
Recommended Course Preparation	ECON 101 and/or ECON 121 are recommended.
Prerequisite NOTE: Unless otherwise indicated, a prerequisite is assumed to be passed with a "D" or better.	(MATH 151 or MATH 155) and (STAT 350 or 351 or 355 or 453 or CMPE 320), both with C or better.
# of Credits Must adhere to the UMBC Credit Hour Policy	3
Repeatable for additional credit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Max. Total Credits	3 <small>This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade.</small>
Grading Method(s)	<input checked="" type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input checked="" type="checkbox"/> Pass-Fail

### PROPOSED CATALOG DESCRIPTION (Approximately 75 words in length. Please use full sentences.):

This is a survey course that will examine the financial industry and markets. Fundamental tools of analysis used by corporate managers, portfolio managers, investment bankers, regulators, and entrepreneurs are presented. Stocks, bonds, derivative securities, and alternative investments are analyzed. An emphasis will be on finding and using financial data, and applying quantitative tools to analyze it.

### RATIONALE FOR NEW COURSE:

This course is the product of a grant from The T. Rowe Price Foundation, and is the culmination of discussions over many years between the Economics Department and the UMBC Administration. Participants in the financial services industry, a major employer and recruiter of our STEM students, has communicated to President Hrabowski's office that STEM students often have little or no knowledge of the financial services industry or financial markets, or the opportunities available to them. Existing courses that cover these topics are designed for Economics Department majors and have numerous prerequisites, and so are not suitable for non-majors with already course-heavy majors. We obtained a grant in Spring 2018 to develop this course, with a promised pilot of the course in Spring 2019.

If successful, the course would be taught once per year.

The target audience is mainly (but not exclusively) the students in CNMS and COEIT.

The proposed use of FINC (not ECON) is so the course is not listed with the ECON classes – the course is not intended for declared ECON or FIEC majors, and will not count toward major or minor requirements in economics. At a later date, the FINC label could also be used for a “Financial Capability/Literacy” course of the sort that many colleges and universities now offer, which could be a 100 or 200 level course with no or very low prerequisites and far less quantitative material.

The 300 numbering is consistent with having two prerequisite courses (Calculus and Statistics). Also, the modal student expected to enroll in the course is a junior or senior. A regular or P/NP option seems appropriate.

The calculus and statistics prerequisites are used so that the course can be taught at a pace and depth that assumes students have this background. Although a survey course, it is envisioned to be quantitative/computational/applied (not merely descriptive) to reflect the state of the industry being studied, so this is appropriate minimal background.

**ATTACH COURSE SYLLABUS (mandatory):**

## FINC 300: Financial Markets and Analysis

Instructor: XXXXX

Office hours and contact information: XXXXX

### *Course description*

This is a survey course that will examine the financial industry and markets. Fundamental tools of analysis used by corporate managers, portfolio managers, investment bankers, regulators, and entrepreneurs are presented. Financial asset classes such as stocks, bonds, derivative securities, and alternative investments are analyzed. An emphasis will be on finding and using financial data and applying quantitative tools to analyze it.

### *Prerequisites*

Understanding finance requires facility in quantitative analysis. The course prerequisites are MATH 151 or MATH 155 and STAT 350 or 351 or 355 or STAT 453 or CMPE 320 with C or better. No background in economics, accounting, or finance is assumed, but ECON 101 and/or ECON 121 are recommended. Students who have completed ECON 471 or ECON 475 should not enroll in this course.

### *Required books*

*Basic Finance: An Introduction to Financial Institutions, Investments, and Management*, 12<sup>th</sup> ed. Herbert Mayo, Cengage, 2019.

Videos and additional readings will be assigned as well.

### *Schedule*

Meeting, Topics, Background reading

Week 1: Introduction

- Course goals and structure
- Overview of the financial systems and the various “players” in it

Reading: Mayo Chapter 1

Week 2: Financial Institutions (Banks, Investment Banking, Securities Markets)

- What do banks do?
- What is investment banking?
- What are the various markets where stocks, bonds, and other financial instruments are bought and sold?

Reading: Mayo Chapter 2-4

Week 3: Financial Institutions (The Federal Reserve, Foreign Exchange)

- What is the Federal Reserve, and why is it important?
- What are foreign currency exchange rates and why are they important?

Reading: Mayo Chapter 5-6

Week 4: Tools of Analysis (Time Value of Money)

- Present value and future value calculations and their applications

Reading: Mayo Chapter 7

Week 5: Tools of Analysis (Risk Measurement and Management)

- Risk measurement and the relevance of statistical concepts
- What are options (puts, calls), futures, swaps?
- How are options used?

Reading: Mayo Chapter 8, 28-29

Week 6: Tools of Analysis (Accounting Data and Financial Statements)

- Reading and analyzing income statements and balance sheets

Reading: Mayo Chapter 9

Week 7: EXAM 1

Week 8: Investments (Stock and Its Valuation)

- What is stock, and what determines its value?
- The role of security analysts and portfolio managers

Reading: Mayo Chapter 10-11, 14

Week 9: Investments (Bonds and Convertible Securities)

- What are bonds, and how do bond markets work?
- The role of credit analysts

Reading: Mayo Chapter 12-13, 15

Week 10: Corporate Finance

- Business organizations and taxation
- How do corporations raise funds to expand?
- How does a corporation measure the “cost” of capital?

Reading: Mayo Chapters 18, 21

Week 11: Corporate Finance (Capital Budgeting)

- How do corporations decide on how to expand their asset base?

Readings: Mayo Chapter 22

Week 12: Data Sources and Computational Skills

Week 13: Financial Careers and Certifications

Week 14: EXAM 2

*Course grading*

Quizzes: 12 worth 25% of grade

Exams: 2 worth 60% of grade

Paper: 15%

Paper: Students will work in a group and examine a course topic in more detail. An approximately 10-page paper will be submitted. Specifics will be provided on Blackboard.

The course grade will be based on the percentage ranges:

A: 90%+      B: 80%-89%      C: 70%-79%      D: 60%-69%      F: 59% points

Students taking the course Pass/No Pass must have 60% or higher for a Pass.

UMBC Statement on Academic Integrity:

“By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC’s scholarly community in which everyone’s work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.”

More information is available at: <http://oue.umbc.edu/home/academic-integrity/resources-for-students/>

UMBC Student Disability Services Statement:

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. UMBC complies with federal legislation for individuals with disabilities (Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the ADA of 2009) that offers reasonable accommodations to qualified students with disabilities. Student Disability Services (SDS), formerly Student Support Services, is the UMBC department designated to:

- receive and maintain **confidential** files of disability-related documentation,
- certify eligibility for services,
- determine reasonable accommodations,
- develop with each student plans for the provision of such accommodations, and

- serve as a liaison between faculty members and students regarding disability-related concerns.

If you have a documented disability and need to request academic accommodations, please refer to the SDS website at [sss.umbc.edu](http://sss.umbc.edu) or contact the office by phone at 410-455-2459, via email at [sss@umbc.edu](mailto:sss@umbc.edu), or in person in Math/Psychology Room 213. If you require accommodations for this class, make an appointment to meet with me to discuss your SDS-approved accommodations.

More information is available at: <http://sds.umbc.edu/>

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