

BUSFIN 4221: Investments

Autumn 2016

Instructor: Andrei S. Gonçalves

Lectures: TuTh 8:00am - 9:20am (SB 300)

Office Hours: Tu 9:45am - 12:00pm (or by Appointment)

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Course Website: <https://carmen.osu.edu>

1 Course Description and Prerequisites

This course is designed to teach the principles of investment and is divided into two main parts.

The first part (modules 1 to 4) introduces financial markets and details theories associated with the trade-off between risk and return in well-functioning markets. Moreover, it details how the risk vs return paradigm leads to well-defined rules for capital allocation among asset classes and securities and, hence, to optimal decisions for portfolio formation.

Most of the principles exposed in the first part implicitly assume that prices are correct. However, for prices to be correct, market participants must know how to price assets in the first place. Therefore, the second part of the course (modules 5 to 7) focuses on general pricing principles applied to two large asset classes: equity and debt. It also introduces derivative securities and the world of active portfolio management.

The prerequisites for this course are: (i) Introduction to Accounting I and II (ACCTMIS 2200 and 2300); (ii) Decision Science and Business Analytics (BUSMG T 2320 and 2321) and (iii) Business Finance (BUSFIN 3220). In a nutshell, you need a basic understanding of statistics and accounting and a good understanding of financial principles such as “the present value of future cash flows”.

2 Readings & Other Material

Textbook and Class Material

The textbook for this class is “*Essentials of Investments*, 9th edition, by Bodie, Kane and Marcus” (henceforth BKM).

If you have BKM 8th or 10th edition, there is no need to buy the 9th edition. The link between these three editions is direct in the sense that chapter X of edition 9 corresponds to chapter X of editions 8 and 10.

The MBA level book “*Investments*, 10th edition, by Bodie, Kane and Marcus” is an extended and more complete version of our textbook. Hence, if you currently own this MBA level textbook, you can find the relevant material we cover in this class within that book. Section 5 provides a link table matching the chapters this class covers to the respective ones in the MBA level version of our textbook.

Investment Books

While the textbook will be the main reading for this class, many other investment books are great to learn about specific investment topics. Here is a brief list of some of these books (in alphabetic order): (1) *Against the Gods*, Peter Bernstein; (2) *Expected Returns*, Antti Ilmanen; (3) *Irrational Exuberance*, Robert Shiller; (4) *How Big Banks Fail*, Darrell Duffie; (5) *Security Analysis*, Benjamin Graham and David Dodd; (6) *The Big Short*, Michael Lewis; (7) *The Black Swan*, Nassim N. Taleb; (8) *The Intelligent Investor*, Benjamin Graham; (9) *Too Big to Fail*, Andrew R. Sorkin; and (10) *When Genius Failed*, Roger Lowenstein.

Additional Sources of Periodic Information

It is good business practice to read the financial press. There is a wide range of alternative choices, but *The Wall Street Journal* (www.wsj.com/studentoffer), *The Financial Times*, *The Economist* and *Bloomberg.com* are all excellent complementary choices.

Reading econ/financial blogs can also be helpful. Which blogs to read is largely a matter of taste. Here is a list with ten popular ones in alphabetic order: (1) *Business Insider*; (2) *Calculated Risk*; (3) *Econbrowser*; (4) *Economix*; (5) *Naked Capitalism*; (6) *Planet Money*; (7) *Real Time*

Economics; (8) *The Big Picture*; (9) *The Grumpy Economist*; and (10) *Zero Hedge*.

Finally, podcasts can be great to listen to when you are doing something that makes it hard to read (e.g., exercising). Planet Money and EconTalk are two interesting choices (the later will require you to think a bit more deeply about economics).

If you are interested in pursuing a Finance Ph.D. or applying to a position that requires research ability after graduating (e.g., a position in a hedge fund such as AQR or LA Capital), feel free to contact me during my office hours. I can provide you a list of academic articles that are historically important and practically useful.

3 Class Format & Grading

7 Quizzes	=	30% of grade (5% each with lowest score dropped)
1 Project	=	30% of grade
Cumulative Final Exam	=	40% of grade
Total	=	100%

Class Format

The course has a total of seven modules and each module is subdivided into specific topics. Each class typically covers one topic, which roughly corresponds to one or two chapters in BKM (a tentative course schedule is provided in section 6). All students are expected to read the respective chapter(s) (as well as any material posted to the class website) before class and bring questions for discussion.

The lectures will often have aspects not covered in the book and/or will address some issues in a different manner. As such, the book should be considered a complement to the lectures as opposed to a substitute for it (and class attendance is expected). The lecture notes (posted to the course website at least 24 hours in advance) were created to guide the discussion and sequence of content in class, which also means they are not a complete source of material for this course. If you want to have study material outside the book, I strongly recommend you to take a lot of notes in class since much of the information provided will be verbal as opposed to written.

Quizzes and Final Exam

In the beginning of each module, a sample quiz (with solutions) will be made available (these will not be graded). After finishing the respective module you will take a 15 to 20 minutes quiz and this one will be graded. The quiz format and style will be identical to the sample quiz provided earlier. Each quiz is worth 5 points and the lowest score among the seven quizzes will be dropped (hence, there are a total of 30 points from quizzes). There will also be a final exam worth 40 points. Quizzes and the final exam are composed of multiple choice questions, are closed book and do not allow for any kind of collaboration or communication between students. All necessary information regarding the grading scheme will be provided in the front page of each quiz/exam.

Absences from quizzes and/or final exam will only be excused for the most serious of reasons and documented by an appropriately accredited professional (e.g., a medical doctor). If you have a job interview scheduled for the date of one of the quizzes you have to inform the instructor by e-mail in advance (and provide the relevant documentation). Dates for quizzes and final exam can be found in the course schedule in section 6. Any time conflict for quizzes and/or final exam should be reported by e-mail as soon as the student identifies the conflict.

Project

The final portion of your grade (30 points) comes from a project. The project is composed by several questions with detailed instructions for how to solve and record the solution of each question. The project due date is in the tentative course schedule (section 6). Even though the project is due towards the end of the semester, you will be required to demonstrate your progress on this project earlier. Lack of progress in the project affects negatively the total points you get in your project. The project instructions will contain all necessary details for how to demonstrate your progress and how your grade will be affected if you fail to do so.

The Final Grade

Your letter grade will be based on your total score (total points received during the class). The letter grade assigned is an informed and final evaluation and not the beginning offer in a bargaining process. If an error occurs in the calculation of your grade, please notify me during the beginning of the following semester and actions will be taken to correct any errors. Please do NOT contact me

to “lobby” for a higher grade. Any lobbying efforts (i.e. asking for a higher grade simply because you want one or need one) will not be tolerated.

Make-up or extra work to improve your grade on an individual basis is not possible. Your general academic situation (for example, “I need a ‘C’ in this course to graduate.”) and/or personal problems cannot be considered. The final grade in the course, once assigned, will not be changed except in the event of a recording error.

4 Other Important Topics

Communication with Instructor

The quickest way to contact me is by email. I will usually respond within one business day. If you want to discuss anything related to the class, but is unable to come to my office hours, send me an e-mail to schedule an appointment. In the e-mail, provide details regarding the topic you want to discuss so that I can prepare myself to be of most help to you.

I do not answer content related questions over e-mail since this is a very inefficient way to deal with questions you might have. As such, if you send me an e-mail asking a content related question I will simply refer you to my office hours.

Policy on Electronic Devices

The absence of unnecessary distractions and interruptions is essential for a positive and effective learning environment. Thus, students may not use any electronic device in class, unless explicitly permitted by the instructor. All electronic devices must be turned off and put away prior to the start of class.

Students who want to take electronic notes may do so but only if it is on a tablet device and that tablet must remain on the flat table top for the entire class time.

Disability Services

(<http://www.slds.osu.edu>)

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss

options. You are also welcome to register with Student Life Disability Services (SLDS) to establish reasonable accommodations. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

SLDS contact information: slds@osu.edu; 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.

Academic Integrity

(<http://oaa.osu.edu/coam.html>)

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

5 BKM Link Table

BKM 9th ed	MBA Level BKM 10th ed
Ch 1	Ch 1
Ch 2	Ch 2
Ch 3	Ch 3
Ch 4	Ch 4
Ch 5	Ch 5
Ch 6	Ch 6, Ch 7 and Ch 8
Ch 7	Ch 9, Ch 10
Ch 8	Ch 11
Ch 9	Ch 12
Ch 10	Ch 14
Ch 11	Ch 16
Ch 12	Ch 17
Ch 13	Ch 18
Ch 14	Ch 19
Ch 15	Ch 20
Ch 17	Ch 22 and Ch 23
Ch 18	Ch 24
Ch 19	Ch 25
Ch 20	Ch 26

6 Tentative Course Schedule

The following schedule is tentative and subject to change based on how the class progresses.

Date	Module	Topic	Reading	
			in BKM	Quizzes/Projects
8/23 (Tu)	<u>Module 1</u>	The Investment Environment	Ch 1	Project available on website
8/25 (Th)	Introduction to Investments (Part I in BKM)	Financial Securities	Ch 2	
8/30 (Tu)		Institutional Investors	Ch 3	
9/1 (Th)		Trading Securities	Ch 4	
9/6 (Tu)		The 2007-08 Financial Crisis	Ch 1.7	Sample Quiz 1 (not graded)
9/8 (Th)	<u>Module 2</u>	The Statistics of Security Returns	Ch 5	
9/13 (Tu)	Portfolio Theory (Part II in BKM)	The Efficient Frontier	Ch 6	Quiz 1
9/15 (Th)		Capital Allocation Line	Ch 5, 6	
9/20 (Tu)		Index Models	Ch 6.5	
9/22 (Th)	<u>Module 3</u>	Capital Asset Pricing Model (CAPM)	Ch 7	
9/27 (Tu)	Factor Models (Part II in BKM)	CAPM & Arbitrage Pricing Theory (APT)	Ch 7	Quiz 2
9/29 (Th)		Multifactor Models & Empirical Evidence	Ch 7	
10/4 (Tu)	<u>Module 4</u>	Efficient Market Hypothesis	Ch 8	Quiz 3
10/6 (Th)	Market Efficiency (Part II in BKM)	Behavioral Finance	Ch 9	
10/11 (Tu)		Efficient Market vs “Anomalies”	Ch 8, 9	Project (progress check)
10/13 (Th)	Autumn Break: No class			
10/18 (Tu)	<u>Module 5</u>	Bond Prices and Yields	Ch 10	Quiz 4
10/20 (Th)	Debt Securities (Part III in BKM)	The Yield Curve	Ch 10	
10/25 (Tu)		Managing Bond Portfolios	Ch 11	
11/27 (Th)	<u>Module 6</u>	Equity Valuation	Ch 13	
11/1 (Tu)	Equity Securities (Part IV in BKM)	Components of Valuation Equation	Ch 13	Quiz 5
11/3 (Th)		Macro and Industry Analysis	Ch 12	
11/8 (Tu)		Financial Statement Analysis	Ch 14	
11/10 (Th)	<u>Module 7</u>	Introduction to Derivatives		
11/15 (Tu)	Derivative Securities (Part V in BKM)	Forwards & Futures	Ch 17	Quiz 6
11/17 (Th)		Swaps	Ch 17	
11/22 (Tu)		Options	Ch 15	Project due
11/24 (Th)	Thanksgiving: No class			
11/29 (Tu)	<u>Special Topic</u>	-	-	
12/1 (Th)	Review I	-	-	Quiz 7
12/6 (Tu)	Review II	-	-	
12/13 (Tu)	FINAL (8:00am - 9:45am)			