

BUSFIN 4221: Investments

Fall 2022

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Instructor Website: <http://andreigoncalves.com>

Course Website: <https://osu.instructure.com/login/canvas>

Lectures: Session 1: Mo/We 2:20-3:40pm (209 Schoenbaum Hall)

Session 2: Mo/We 3:55-5:15pm (265 Gerlach Bldg)

Instructor Office Hours: Tu 4:15-5:15pm (846 Fisher Hall)

TA Office Hours: Mo/Tu/We/Th 1:00-2:00pm (040 Fisher Hall)

1 Course Description and Prerequisites

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

In the first part of the course (Modules 1 to 3), we outline the investment environment and detail the general principles underlying the valuation of financial assets, with a focus on the two major asset classes: debt and equity. As will become clear from this first part of the course, the valuation of any financial asset is based on the present value of its future cash flows, which requires a discount rate. As such, in the second part of the course (Modules 4 to 6), we detail how different theories associated with the trade-off between risk and return in well-functioning markets lead to a direct link between discount rates and risk exposures. In this process, we will also learn how the risk vs return paradigm provides optimal rules for capital allocation among asset classes and securities.

The prerequisites for this course are: (i) Introduction to Accounting I and II (ACCTMIS 2200 and 2300); (ii) Decision Science and Business Analytics (BUSMGMT 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.

2 Readings & Other Material

Textbook and Class Material

All material necessary for this course will be posted on the course webpage, including lecture slides and practice quizzes.

As such, no textbook is required for this course. That said, “*Investments*, 12th edition, by Bodie, Kane, and Marcus” (henceforth BKM) can be used as a complementary reading (prior editions would work as well). The tentative course schedule (see Section 5) details the book chapters (most closely) associated with each topic discussed in class. However, you should not expect the lectures to follow the exact approach in BKM since the class material is not based on any particular textbook (the way I present the content differs a lot from textbooks).

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*, and *The Economist* are popular complementary choices.

3 Class Format & Grading

6 Problem Sets	=	30% of grade (5% each with lowest score replaced by the highest score)
6 Quizzes	=	36% of grade (6% each with lowest score replaced by the highest score)
Cumulative Final Exam	=	34% of grade
Total	=	100%

Class Format

The course has a total of six modules and each module is subdivided into specific topics. Each lecture covers one topic and the lecture slides are all you need to follow the lectures. The lecture slides will be available on the course webpage. I post two versions of the slides (labeled “short version” and “long version”). They have the same content except that the long version (which I use as lecture slides) shows the progress of each page “by click” to facilitate the content presentation.

A tentative class schedule is available in Section 5. The tentative class schedule is for illustration purpose and subject to changes based on how the class progresses. The continuously updated class schedule can be found on Canvas.

Attendance

Regular (in-person) class attendance and participation is expected from all students. Consistent with the business school's position on in-person classes, I will not provide a regular Zoom attendance option or class recordings. This approach is intended to maximize in-class participation, which is beneficial to the learning environment.

Problem Sets

After each of the six modules a problem set is release. Each problem set has a one week deadline and is meant to be submitted on the course webpage individually (you cannot discuss the problem sets with your classmates before the deadline). These problem sets are composed of short essay questions meant to test whether you understand the big picture underlying each topic we cover. Each problem set is worth 5 points (for a total of 30 points) with your lowest score among the problem sets replaced by your highest score among the problem sets.

See the tentative class schedule in Section 5 for the dates in which problem sets will be released and their respective deadlines.

Quizzes

In the last lecture of each module you will take an in-person quiz covering the content of the respective module. You are allowed to consult your slides, notes, and any book while you take your quizzes. Each quiz is worth 6 points (for a total of 36 points) with your lowest score among the quizzes replaced by your highest score among the quizzes. One class before you take each quiz I release a practice quiz (with solutions) that is similar to your actual quiz in terms of content and format. The practice quiz will not be graded but I will solve it in class right before you take your actual quiz.

See the tentative class schedule in Section 5 for the dates when the practice quizzes will be released and the dates when you will take the respective quizzes in class.

Final Exam

There is a cumulative Final Exam (worth 34 points). You are allowed to consult your slides, notes, and any book while you take your final exam. A Practice Final Exam will be made available in a timely manner to help you prepare for the exam. The Practice Final Exam will not be graded, but I will solve it in the final review session.

See the tentative class schedule in Section 5 for the dates of the final review session and Final Exam.

Letter Grade

Your letter grade will be based on your total score (total points received during the class) and the overall class performance. 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.

You should view my grading policy as a clear indication that I strive to give all students in the class the exact same opportunities.

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.

Class Information

Class-related information will be posted on Canvas (and supersedes this Syllabus). Moreover, I will post announcements to the course webpage so that you always know what to expect over the subsequent classes.

Academic Integrity

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.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Student COVID-related Accommodation Process

Continuous engagement with this course is essential to learning the material. Students are expected to attend class and engage with assignments and discussion prompts for every scheduled meeting. Students who need to miss class or who are not able to participate due to illness (COVID-19 or other illnesses), exposure to COVID-19, care for family members exposed to COVID-19 or other reasons are expected to contact the instructor as soon as possible to arrange for accommodation. Students in special situations or those requiring specific, long-term or other accommodation should seek support from appropriate university offices including but not limited to: Student Advocacy, Student Life Disability Services and the Office of Institutional Equity.

Disability Services

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process (slds.osu.edu/covid-19-info/covid-related-accommodation-requests/), managed by Student Life Disability Services. 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. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. 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; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

Online reporting form at equity.osu.edu, Call 614-247-5838 or TTY 614-688-8605, Or Email equity@osu.edu The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately. The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information:

1. Any human resource professional (HRP);
2. Anyone who supervises faculty, staff, students, or volunteers;
3. Chair/director; and
4. Faculty member.

Counseling and Consultation Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life Counseling and Consultation Services (CCS) by visiting ccs.osu.edu or calling (614) 292- 5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org.

5 Tentative Course Schedule

The following schedule (including deadlines) is tentative and subject to changes based on how the class progresses. This document is NOT updated after the beginning of the course, so please use the Canvas website to keep track of the (updated) course schedule.

Date	Module	Lecture	BKM Chapter	Extra Info
Aug-24 (We)	<u>Module 1</u>	Introduction to Investments	Ch 1	
Aug-29 (Mo)	The Investment Environment	Financial Assets	Ch 2	
Aug-31 (We)		Investors & Trading	Ch 3, 4	PS1 & Practice Quiz 1 Available
Sep-05 (Mo)		Quiz 1	-	
Sep-07 (We)		No Classes (Labor Day)		Deadline to Submit PS1
Sep-12 (Mo)	<u>Module 2</u>	Zero-Coupon Bonds	Ch 14, 15	
Sep-14 (We)	Debt Securities	Debt with no Default Risk	Ch 14, 15	
Sep-19 (Mo)		Debt with Default Risk	Ch 14, 15	PS2 & Practice Quiz 2 Available
Sep-21 (We)		Quiz 2	-	
Sep-26 (Mo)	<u>Module 3</u>	Equity Valuation Components	Ch 17, 18	Deadline to Submit PS2
Sep-28 (We)	Equity Securities	Equity Valuation	Ch 18	
Oct-03 (Mo)		Profitability	Ch 19	PS3 & Practice Quiz 3 Available
Oct-05 (We)		Quiz 3	-	
Oct-10 (Mo)		Derivative Securities	Ch 20, 21, 22, 23	Deadline to Submit PS3
Oct-12 (We)	<u>Module 4</u>	The Statistics of Security Returns	Ch 5	
Oct-17 (Mo)	Portfolio Theory	The Efficient Frontier	Ch 6, 7	
Oct-19 (We)		The Capital Allocation Line	Ch 6, 7	
Oct-24 (Mo)		Index Models	Ch 8	PS4 & Practice Quiz 4 Available
Oct-26 (We)		Quiz 4	-	
Oct-31 (Mo)	<u>Module 5</u>	The CAPM	Ch 9	Deadline to Submit PS4
Nov-02 (We)	Factor Models	Anomalies	Ch 13	
Nov-07 (Mo)		The APT	Ch 10	
Nov-09 (We)		The ICAPM	Ch 10	PS5 & Practice Quiz 5 Available
Nov-14 (Mo)		Quiz 5	-	
Nov-16 (We)	<u>Module 6</u>	Efficient Market Hypothesis (EMH)	Ch 11	Deadline to Submit PS5
Nov-21 (Mo)	Market Efficiency	No Class	-	
Nov-23 (We)		No Classes (Thanksgiving)	-	
Nov-28 (Mo)		EMH Tests	Ch 11, 13	
Nov-30 (We)		Behavioral Finance	Ch 12	PS6 & Practice Quiz 6 Available
Dec-05 (Mo)		Quiz 6	-	Practice Final Exam Available
Dec-07 (We)		FINAL EXAM REVIEW		Deadline to Submit PS6
Dec-09 (Fri)		FINAL EXAM (324 Hitchcock from 6:00-7:45pm)		