

CORPORATE FINANCE

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 CORn-NBA.2.S.D

Area Finance Number of sessions: 25 Academic year: 24-25 Degree course: SECOND Number of credits: 5.0 Semester: 1° Category: COMPULSORY Language: English

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Hang Dong is an assistant professor of Finance at the IE University. He holds PhD in Business Administration and Quantitative Methods from the University Carlos III of Madrid. Prior to his PhD study, Hang worked as a journalist and an editor at the Finance Channel at China Central Television Station. His research interests include behavioral finance and application of information systems in finance. Specifically, he is interested in how information in social media affects indiviudals' decisions.

Office Hours

Office hours will be on request. Please contact at:

To be announced.

SUBJECT DESCRIPTION

This is an introductory course in Finance. The course provides an overview of the theories and the practical applications of Finance.

LEARNING OBJECTIVES

The main objective of this course is to develop a framework and basic tools for financial decisionmaking, and to provide a solid grounding in the principles and practice of corporate finance.

Another objective is to be confident with the use of Excel spreadsheets for solving practical finance problems. Applied finance exercises requiring the use of Excel are introduced in a coherent and complementary way with the other subjects that are part of the Business Administration Degree.

The course is designed with the following specific objectives:

- To teach the fundamental methods and skills of finance.
- To prepare you to make sound personal and professional financial decisions.
- To provide the knowledge that enables you to better understand the role of finance in the real life and management.
- To prepare you to take more advanced courses in finance and other business areas.

TEACHING METHODOLOGY

This course is divided into 25 sessions. The 24th session will be the review session and the 25th session will be the final examination.

The basic financial concepts are taught through the classes. In order to follow the classes, the students are expected to be familiar with the contents discussed in class by reading in advance the corresponding chapters and the slides. The professor encourages the students to ask any questions during the class. Discussions on the problem sets and presentation are also welcome. After the class, individual study and content review is required to master the knowledge in the classes.

The purpose of learning finance is to apply it to the real life. We will relate the theories in this course to real-life applications. Therefore, it's important to keep up by working exercises. Doing exercises is the best way to learn Finance. Problem sets for each topic will be provided to the students. Students will have to prepare in advance the problem sets, which will be graded. The problem sets are the building block towards the midterm and the final exam

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

| Learning Activity | Weighting | Estimated time a student should dedicate to prepare for and participate in | |
|---|-----------|---|--|
| Lectures | 10.4 % | 13.0 hours | |
| Discussions | 8.8 % | 11.0 hours | |
| Exercises in class, Asynchronous sessions, Field Work | 8.8 % | 11.0 hours | |
| Group work | 32.0 % | 40.0 hours | |
| Individual studying | 40.0 % | 50.0 hours | |
| TOTAL | 100.0 % | 125.0 hours | |

AI POLICY

In today's world, generative artificial intelligence (GenAI) is changing how we work, study and, in general, how we get things done. However, in the context of this course, the use of GenAI is not permitted, unless it is otherwise stated by the instructor. The use of GenAI tools would jeopardize the students' ability to acquire fundamental knowledge or skills of this course.

If a student is found to have used AI-generated content for any form of assessment, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

PROGRAM

CONTENT

PART 1: INTRODUCTION TO CORPORATE FINANCE

See below for the textbook used. BMA stands for Brealey, Myers & Allen: Principles of Corporate Finance.

The course consists of two parts. The first part of the course starts with an introduction to Corporate Finance and the basic hypotheses widely used. Then it focuses on the applications of the time value of money: the investment decisions criteria and fixed income securities. The second part introduces the concept of risk and its relationship with return: portfolio theory.

SESSION 1 (LIVE IN-PERSON)

Introduction to Corporate Finance

SESSION 2 (LIVE IN-PERSON)

Investment Decisions Criteria: NPV Lecture:

- Time Value of Money
- NPV & mechanics
- Compound interest rate & inflation rate
- NPV shortcut applications

Reading Assignment:

Book Chapters: BMA ch. 1, 2. (Book) (See Bibliography)

SESSION 3 (LIVE IN-PERSON)

Investment Decisions Criteria: NPV Lecture:

- Time Value of Money
- NPV & mechanics
- Compound interest rate & inflation rate
- NPV shortcut applications

Reading Assignment:

Book Chapters: BMA ch. 1, 2. (Book) (See Bibliography)

SESSION 4 (LIVE IN-PERSON)

Investment Decisions Criteria: NPV Lecture:

- Time Value of Money
- NPV & mechanics
- Compound interest rate & inflation rate
- NPV shortcut applications

Reading Assignment:

Book Chapters: BMA ch. 1, 2. (Book) (See Bibliography)

SESSION 5 (LIVE IN-PERSON)

Investment Decisions Criteria: NPV Lecture:

- Time Value of Money
- NPV & mechanics
- Compound interest rate & inflation rate
- NPV shortcut applications

Reading Assignment:

Book Chapters: BMA ch. 1, 2. (Book) (See Bibliography)

SESSION 6 (ASYNCHRONOUS)

Introduction to Fixed Income Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates
- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing
- Arbitrage
- Yield to Maturity (YTM)

Reading Assignment:

Book Chapters: BMA ch. 3. (Book) (See Bibliography)

SESSION 7 (LIVE IN-PERSON)

Introduction to Fixed Income Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates
- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing
- Arbitrage

- Yield to Maturity (YTM)

Reading Assignment:

Book Chapters: BMA ch. 3. (Book) (See Bibliography)

SESSION 8 (LIVE IN-PERSON)

Introduction to Fixed Income Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates

- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing
- Arbitrage

- Yield to Maturity (YTM)

Reading Assignment:

Book Chapters: BMA ch. 3. (Book) (See Bibliography)

SESSION 9 (LIVE IN-PERSON)

Introduction to Fixed Income Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates
- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing
- Arbitrage
- Yield to Maturity (YTM)

Reading Assignment:

Book Chapters: BMA ch. 3. (Book) (See Bibliography)

SESSION 10 (LIVE IN-PERSON)

Introduction to Fixed Income

Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates
- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing
- Arbitrage
- Yield to Maturity (YTM)

Reading Assignment:

Book Chapters: BMA ch. 3. (Book) (See Bibliography)

SESSION 11 (LIVE IN-PERSON)

Introduction to Fixed Income Lecture:

- Introduction to Bonds
- Term Structures of Interest Rates
- Spot & Forward Interest Rates
- Agency Default Risk & Bond Ratings
- Bond Pricing

Arbitrage
Yield to Maturity (YTM)
Reading Assignment:
Book Chapters: BMA ch. 3. (Book) (See Bibliography)

PART 2: RISK AND PORTFOLIO THEORY

SESSION 12 (LIVE IN-PERSON)

Other Investment Criteria

Lecture:

- Alternatives to NPV (IRR & Payback Period) & critiques

- Investments with different lives

Reading Assignment:

Book Chapters: BMA ch. 5. (Book) (See Bibliography)

SESSION 13 (ASYNCHRONOUS)

Other Investment Criteria Lecture:

- Alternatives to NPV (IRR & Payback Period) & critiques

- Investments with different lives

Reading Assignment: Book Chapters: BMA ch. 5. (Book) (See Bibliography)

SESSION 14 (LIVE IN-PERSON)

Other Investment Criteria Lecture:

- Alternatives to NPV (IRR & Payback Period) & critiques

- Investments with different lives

Reading Assignment:

Book Chapters: BMA ch. 5. (Book) (See Bibliography)

SESSION 15 (LIVE IN-PERSON)

MIDTERM EXAM (Chapters 1, 2, 3 and 5)

SESSION 16 (LIVE IN-PERSON)

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line

- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment:

Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 17 (LIVE IN-PERSON)

Portfolio Theory and CAPM Lecture:

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment:

Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 18 (LIVE IN-PERSON)

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment: Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 19 (LIVE IN-PERSON)

Portfolio Theory and CAPM Lecture:

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment: Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 20 (ASYNCHRONOUS)

Portfolio Theory and CAPM Lecture:

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC
- Reading Assignment:

Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 21 (LIVE IN-PERSON)

- Mean Variance Analysis
- Mean Variance Frontier

- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment:

Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 22 (LIVE IN-PERSON)

Portfolio Theory and CAPM Lecture:

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas
 - WACC

Reading Assignment:

Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 23 (LIVE IN-PERSON)

- Mean Variance Analysis
- Mean Variance Frontier
- Capital Allocation Line
- Capital Market Line
- Capital Asset Pricing Model (CAPM)
- Systemic vs. diversifiable risk
- Arbitrage Asset Pricing Theory
- Beta Estimation
 - Cost of Capital:
 - Unlevering betas

- WACC Reading Assignment: Book Chapters: BMA ch. 7, 8, 9. (Book) (See Bibliography)

SESSION 24 (LIVE IN-PERSON)

Review session

SESSION 25 (LIVE IN-PERSON)

Final Exam

EVALUATION CRITERIA

Your final grade in the course will be based on both individual and group work of different characteristics that will be weighted in the following way:

For the first ordinary call students pass the subject if the average of their grades, weighted according to the percentages shown below, is 5 or more and if they obtain a minimum of 4 out of 10 in the final exam. Students who obtain less than 4 in the final exam and whose average grade is higher than 4 will obtain a 4 as their final grade.

| criteria | percentage | Learning Objectives | Comments |
|----------------------------|------------|------------------------|--------------|
| Class Participation | 10 % | | |
| Workgroups | 20 % | | Problem sets |
| Intermediate Tests | 25 % | | Midterm Exam |
| Final Exam | 45 % | | |

RE-SIT / RE-TAKE POLICY

A. CLASS PARTICIPATION (it represents 10% of the overall grade)

The students are expected to come prepared and participate actively (and voluntarily) during lectures. In addition, the professor can cold-call on students, particularly on those who have not participated in a while. The students are required to obey the "IE UNIVERSITY'S CODE OF CONDUCT IN CLASS" (see Section 8). Three main criteria will be used in reaching judgment about your class participation:

- Depth and Quality of Contribution: The most important dimension of participation concerns what it is that you are saying. A high quality comment reveals depth of insight, rigorous use of case evidence, consistency of argument, and realism.
- Moving Your Peers' Understanding Forward: Great ideas can be lost through poor presentation. A high-quality presentation of ideas must consider the relevance and timing of comments, and the flow and content of the ensuing class discussion. It demands comments that are concise and clear, and that are conveyed with a spirit of involvement in the discussion at hand.
- <u>Frequency</u>: Frequency refers to the attainment of a threshold quantity of contributions that is sufficient for making a reliable assessment of comment quality. The logic is simple: if contributions are too few, one cannot reliably assess the quality of your remarks. However, once threshold quantity has been achieved, simply increasing the number of times you talk does not automatically improve your evaluation. Beyond the threshold, it is the quality of your

comments that must improve. In particular, one must be especially careful that in claiming more than a fair share of "airtime", quality is not sacrificed for quantity. Finally, your attempts at participation should not be such that the instructor has to "go looking for you". You should be attempting to get into the debate on a regular basis.

B. PROBLEM SETS (the sets represent a total of 20% of the overall grade)

The problem sets contribute to a total of 20% of your grade, you are recommended to work in groups no larger than 4 or 5 students and hand in 1 copy of the assignment promptly at the deadline (start of the session). Late assignments will not be graded. These problem sets will serve as guidance toward the midterm and the final exam. Please pay attention to the presentation of your solutions, it will be taken into account for the marks.

C. MIDTERM EXAM

The midterm exam is a mandatory and individual computer-based assessment. It counts 25% of the final mark. The content of the midterm will be based on the previous problem sets. Please ensure you bring a non-graphing, non-financial calculator to the exam.

D. FINAL EXAM

The final exam is a mandatory and cumulative computer-based exam. A minimum grade of 4/10 is required for this exam in order to pass the subject, even if the aggregate mark of the course including all the assessments is greater than 5. The retake policy will follow the university rule (see below).

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).
- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) i.e., "notable" in the extraordinary call.
- Re-takers: Students who failed the subject on a previous Academic Year and are now reenrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is

10.0 (out of 10.0). The evaluation will be realized as follows: Option 1. Midterm exam (40%) and the final comprehensive exam (60%). The student must obtain a 5 out of 10 minimum in the final exam in order to pass the subject. Option 2. The student may also choose to take the final exam as the only assessment (100%). For both options, the passing grade is 5.

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

- Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.
- In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Compulsory

- Brealey, Myers & Allen. (2022). *Principles of Corporate Finance (BMA).* 14th. McGraw Hill. ISBN 9781265074159 (Digital)

Only Connect Access through:

https://connect.mheducation.com/class/h-dong-nba2sd

BEHAVIOR RULES

Please, check the University's Code of Conduct <u>here</u>. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy <u>here</u>. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code <u>here</u>. The Program Director may provide further indications.