

# **CAPITAL MARKETS**

#### Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2023 CM-NBA.2.M.E

Area Finance Number of sessions: 25 Academic year: 23-24 Degree course: SECOND Number of credits: 5.0 Semester: 2° Category: COMPULSORY Language: English

#### Professor: JORGE CASTELLANOS

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Jorge Castellanos worked in multilateral, commercial and investment banking, private equity, infrastructure, and public service. He managed diverse institutions: ETB (telecoms), Bancafé (bank), FINTRA (private equity), Correval investment banking, Fogafín (deposit insurance/bank restructuring), Banking Superintendence (regulator of banks/insurers/pension funds), Public Credit (national debt office), and worked at JP Morgan and The World Bank.

He developed solutions to a banking crisis, created the government bond market (TES), enacted financial regulation, restructured, turned around and sold companies, and managed risks, financing, derivatives, and private equity funds. He advised multilaterals, governments, and private clients, served on numerous boards of directors, and taught finance at U. de Los Andes and IE University.

PhD, Business Economics, Columbia University.

A regular time period for office hours will be determined during the first week of classes.

#### SUBJECT DESCRIPTION

Capital Markets is the second core finance subject, following the previous topics of Corporate Finance.

In Corporate Finance we learned how to evaluate financial returns, bringing future returns to the present (Net Present Value), evaluating the riskiness of assets and relating them to get the expected financial returns (Portfolio Theory and CAPM).

In Capital Markets we focus on specific securities and security markets (debt, equity and derivatives), and on asset pricing of these securities, with the aim of conveying the practical applications of investment theory.

#### LEARNING OBJECTIVES

The objective of this course is to build on the framework developed in Corporate Finance to analyse financial markets.

Throughout the course students will be given theories and illustrative examples of how to approach specific securities markets, so that they can develop insights as to how to operate in them and, equally important, understand the information provided by those securities markets.

Like in case of Corporate Finance, another objective of the subject 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.

### TEACHING METHODOLOGY

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	

#### PROGRAM

See below for the textbook used. BKM stands for Bodie, Kane, Marcus: Essentials of Investments. The subject is divided into four main parts: INTRODUCTION TO CAPITAL MARKETS, MACRO-FINANCE, SECURITY ANALYSIS, and DERIVATIVES MARKETS.

### PART 1. INTRODUCTION TO CAPITAL MARKETS

### **SESSION 1 (LIVE IN-PERSON)**

**SESSION 1: Introduction** 

#### Lecture

- Introduction to Capital Markets Reading assigment (to be read before our session): Book Chapters: BKM ch 1 (See Bibliography)

### **SESSION 2 (LIVE IN-PERSON)**

SESSIONS 2-6: Asset Classes, Instruments and Markets Lectures and Exercises:

- Intro to Money Market, Bond Market, Equity Securities, Indexes, Derivatives
- How firms issue securities, how securities are traded
- The way markets operate, the regulations

Reading assigment (to be read before our sessions): Book Chapters: BKM ch 2, 3 (See Bibliography)

### **SESSION 3 (LIVE IN-PERSON)**

SESSIONS 2-6: Asset Classes, Instruments and Markets Lectures and Exercises:

- Intro to Money Market, Bond Market, Equity Securities, Indexes, Derivatives
- How firms issue securities, how securities are traded
- The way markets operate, the regulations

Reading assigment (to be read before our sessions):

### **SESSION 4 (LIVE IN-PERSON)**

SESSIONS 2-6: Asset Classes, Instruments and Markets Lectures and Exercises:

- Intro to Money Market, Bond Market, Equity Securities, Indexes, Derivatives
- How firms issue securities, how securities are traded
- The way markets operate, the regulations

Reading assigment (to be read before our sessions):

### **SESSION 5 (LIVE IN-PERSON)**

SESSIONS 2-6: Asset Classes, Instruments and Markets Lectures and Exercises:

- Intro to Money Market, Bond Market, Equity Securities, Indexes, Derivatives
- How firms issue securities, how securities are traded
- The way markets operate, the regulations

Reading assigment (to be read before our sessions):

### **SESSION 6 (ASYNCHRONOUS)**

SESSIONS 2-6: Asset Classes, Instruments and Markets Exercises:

- Intro to Money Market, Bond Market, Equity Securities, Indexes, Derivatives
- How firms issue securities, how securities are traded
- The way markets operate, the regulations

#### **PART 2. MACRO-FINANCE**

#### **SESSION 7 (LIVE IN-PERSON)**

SESSION 7-8: Macroeconomic and Industry Analysis Lecture & exercises

- Global Economy vs Domestic Economy
- Business Cycles
- Industry Analysis

Reading assignment:

Book Chapters: BKM ch 12 (See Bibliography)

### **SESSION 8 (LIVE IN-PERSON)**

SESSION 7-8: Macroeconomic and Industry Analysis Lecture & exercises

- Global Economy vs Domestic Economy
- Business Cycles
- Industry Analysis

Reading assignment:

### PART 3. SECURITY ANALYSIS

#### **SESSION 9 (LIVE IN-PERSON)**

SESSION 9-15: Equity Valuation Models Lecture

- Valuation by comparable
- Intrinsic Value versus Market Price
- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches
- The Aggregate Stock Market

Reading assignment: Book Chapters: BKM ch 13 (See Bibliography)

# **SESSION 10 (LIVE IN-PERSON)**

SESSION 9-15: Equity Valuation Models Lecture

- Valuation by comparable
- Intrinsic Value versus Market Price
- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches
- The Aggregate Stock Market

Reading assignment:

# **SESSION 11 (LIVE IN-PERSON)**

SESSION 9-15: Equity Valuation Models Lecture

- Valuation by comparable
- Intrinsic Value versus Market Price
- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches
- The Aggregate Stock Market

Reading assignment:

# **SESSION 12 (LIVE IN-PERSON)**

SESSION 9-15: Equity Valuation Models Lecture

- Valuation by comparable
- Intrinsic Value versus Market Price
- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches

- The Aggregate Stock Market Reading assignment:

# **SESSION 13 (ASYNCHRONOUS)**

SESSION 9-15: Equity Valuation Models Exercises

- Valuation by comparable
- Intrinsic Value versus Market Price

- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches
- The Aggregate Stock Market

#### **SESSION 14 (LIVE IN-PERSON)**

SESSION 9-15: Equity Valuation Models Lecture

- Valuation by comparable
- Intrinsic Value versus Market Price
- Dividend Discount Models
- Price-Earnings Ratio
- Free Cash Flow: Valuation Approaches
- The Aggregate Stock Market

### **SESSION 15 (LIVE IN-PERSON)**

MIDTERM EXAM (Chapters 1, 2, 3 & 12)

### PART 4. DERIVATIVES MARKETS

#### **SESSION 16 (LIVE IN-PERSON)**

SESSIONS 16-20: Options Markets Lecture and exercises

- The Option Contract
- Values of Options at Expiration
- Option Strategies
- Option-like Securities
- Exotic Options

Book Chapters: BKM ch 15,16 (See Bibliography)

### **SESSION 17 (LIVE IN-PERSON)**

SESSIONS 16-20: Options Markets Lecture and exercises

- The Option Contract
- Values of Options at Expiration
- Option Strategies
- Option-like Securities
- Exotic Options

# **SESSION 18 (LIVE IN-PERSON)**

SESSIONS 16-20: Options Markets Lecture and exercises

- The Option Contract
- Values of Options at Expiration
- Option Strategies
- Option-like Securities
- Exotic Options

### **SESSION 19 (LIVE IN-PERSON)**

SESSIONS 16-20: Options Markets

Lecture and exercises

- The Option Contract
- Values of Options at Expiration
- Option Strategies
- Option-like Securities
- Exotic Options

#### **SESSION 20 (ASYNCHRONOUS)**

SESSIONS 16-20: Options Markets Exercises:

- The Option Contract
- Values of Options at Expiration
- Option Strategies
- Option-like Securities
- Exotic Options

#### **SESSION 21 (LIVE IN-PERSON)**

SESSIONS 21-23: Futures Markets Lecture & Exercises:

- The Futures Contract
- Mechanics of Trading in Futures Markets
- Future Markets Strategies
- Determination of Futures Prices
- Financial Futures
- Swaps

Reading assignment:

Book Chapters: BKM ch 17 (See Bibliography)

#### **SESSION 22 (LIVE IN-PERSON)**

#### SESSIONS 21-23: Futures Markets

Lecture & Exercises:

- The Futures Contract
- Mechanics of Trading in Futures Markets
- Future Markets Strategies
- Determination of Futures Prices
- Financial Futures
- Swaps

Reading assignment:

### **SESSION 23 (LIVE IN-PERSON)**

SESSIONS 21-23: Futures Markets

Lecture & Exercises:

- The Futures Contract
- Mechanics of Trading in Futures Markets
- Future Markets Strategies
- Determination of Futures Prices
- Financial Futures
- Swaps

Reading assignment:

### **SESSION 24 (LIVE IN-PERSON)**

SESSION 24: Review Exercises & Q&A

### **SESSION 25 (LIVE IN-PERSON)**

SESSION 25: Final Exam 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:

criteria	percentage	Learning Objectives	Comments
<b>Class Participation</b>	10 %		
Problem sets	20 %		
Midterm exam	25 %		
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.
- Frequency: 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. 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 70% 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 re-enrolled 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

- Bodie, Kane, Marcus. (2022). *Essentials of Investments (BKM).* 12th. McGraw Hill. ISBN 9781260772166 (Digital)

Only Connect Access through:

https://connect.mheducation.com/class/j-castellanos-sep-2023-cm-nba2me

#### **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.