# uc3m Universidad Carlos III de Madrid

## Asset valuation and selection

Review date: 11-08-2020 Academic Year: (2020 / 2021)

Department assigned to the subject: Department of Business Administration

Coordinating teacher: PEÑA SANCHEZ DE RIVERA, JUAN IGNACIO

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

#### STUDENTS ARE EXPECTED TO HAVE COMPLETED

Mathematics (Linear Algebra and Calculus), Statistics, Econometrics I and II, Microeconomics III, Financial Economics, Corporate Finance, Financial Systems

## COMPETENCES AND SKILLS THAT WILL BE ACQUIRED AND LEARNING RESULTS.

The design and management of Long-run and short-run investment strategies with special focus on the energy transition investing.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

PROGRAM:

Chapter 1. Introduction

What is this course about?

Grading

Data and Software

**Project** 

Asset standardized description (Assignment #1)

Chapter 2. Investments: Assets and Strategies

**Asset Classes** 

**CFD** 

ETF (Assignment #2)

Investment Strategies: Passive and Active

Asset Allocation Security Selection Market Timing Portfolio weights Portfolio performance

Chapter 3. Green Investment Gap

Green Investment Gap (GIG)

GIG: Public sector initiatives

Road map

Sources of financing

GIG: private markets

Limitations of traditional instruments

New financial instruments for the energy transition

Chapter 4. Sources of financing and limitations of traditional products

Sources of financing

Return and risk: key factors Who does what: Debt Who does what: Equity

Limitations of traditional instruments: bonds and stocks (Assignment #3)

## Chapter 5. Green Investment Banks

Green Investment Banks (GIB) What they are What they do Risk mitigants Transaction enablers Key contributions Measuring results

# Chapter 6. Green Bonds

What is a green bond? Labeling The market of GB Primary market Secondary market **Portfolios** Corporate performance of GB issuers Other green debt instruments

## Chapter 7. Power Purchase Agreements

Why PPA? Physical PPA Virtual PPA (VPPA) Cash flows VPPA VPPA as a Financial Swap Pricing Fixed-for-floating Swaps Prons and cons of VPPA Case: Cummins VPPA (Assignment #4)

# Chapter 8. Securitization and YieldCos

Securitization Solar Securitization Refinancing Master Limited Partnerships (MLPs) YieldCos structure **CAFD Pros and Cons** A Viable model for YieldCos

## Chapter 9. Personal portfolio choice

**Preliminaries** Life expectancy Instruments Insurance Asset allocation Investment funds **REITS** RoboAdvisors

# Chapter 10. Behavioral finance

Efficient Markets? Some experiments Psychology

**Biases** 

**Preferences** 

**Prospect Theory** 

Limits to Arbitrage

**Bubbles** 

Behavioral Investment Strategies

## LEARNING ACTIVITIES AND METHODOLOGY

## Methodology:

- Theory. (1)
- (2) Cases
- (3)Computer simulations.
- (4) **Exercises**
- (5) Class discussion.

#### ASSESSMENT SYSTEM

Grading: Project paper, Cases and exercises, Class participation.

Cases and exercises/class participation 40%.

Cases: groups of 4 persons Project: Individual 60%

## % end-of-term-examination:

100

% of continuous assessment (assignments, laboratory, practicals...):

## **BASIC BIBLIOGRAPHY**

- COCHRANE, J.H. Asset Pricing, Princeton University Press., 2005
- DIMSON, E., P. MARSH, and M. STAUNTON Triumph of the Optimists: 101 Years of Global Investment Returns, Princeton University Press, 2002
- SHEFRIN, H. Beyond Greed and Fear: Understanding Behavioral Finance, Oxford University Press., 2002
- A. Ilmanen Expected returns, Wiley, 2011
- CAMPBELL, J. y VICEIRA, Strategic Asset Allocation, Oxford University Press, . 2002.

## ADDITIONAL BIBLIOGRAPHY

- H. Minsky Stabilizing an unstable economy, McGraw Hill, 2008
- Monnery, N. Safe as Houses?. A Historical Analysis of Property Prices.., London Publishing., 2011