# uc3m Universidad Carlos III de Madrid

#### Asset valuation and selection

Academic Year: (2023 / 2024) Review date: 28-12-2023

Department assigned to the subject: Business Administration Department Coordinating teacher: PEÑA SANCHEZ DE RIVERA, JUAN IGNACIO

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

#### REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Mathematics (Linear Algebra and Calculus), Statistics, Econometrics I and II, Microeconomics III, Financial Economics, Corporate Finance, Financial Systems
Programming skills in Matlab o similar language (S, R).

#### **OBJECTIVES**

This course presents the main tools for designing and evaluating investment strategies. First, we review the main asset classes and investment instruments. After describing the main asset classes, investment instruments, and portfolio performance measures, we focus on the critical aspects of sustainable financial investing. Next, we review the elements of investment strategies, and the course ends with some suggestions for personal portfolio choice. All the material and the readings are in English.

#### **DESCRIPTION OF CONTENTS: PROGRAMME**

Course: 4 Semester: First

PROGRAM:

Chapter 1. Introduction

What is this course about?
Grading
Data and Software
Project
Asset standardized description

Chapter 2. Asset Classes, Investments Instruments, and Portfolio Performance

Asset Classes
Investment Instruments
Financial Risk Factors
CFD
Investment funds
ETF
Assessing Portfolio Perform

Assessing Portfolio Performance

Chapter 3. Sustainable Finance

Why is sustainability important?
Traditional and sustainable finance
ESG factors
ESG Investment Strategies
Green Financial products

Chapter 4. The Elements of the Investment Strategy

Passive Investment

Active Investment **Asset Allocation** Security Selection Market Timing

# Chapter 5. Personal portfolio choice

**Preliminaries** Life expectancy Instruments Insurance Asset allocation Investment funds **REITs** 

#### LEARNING ACTIVITIES AND METHODOLOGY

## Methodology:

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

## **ASSESSMENT SYSTEM**

## **GRADING:**

- Groups (maximum four persons) j
- Group Practice session (1-10) PDF reports :  $10 \times 4 = 40$  points j
- Individual Project: 60 points.

## % end-of-term-examination:

% of continuous assessment (assignments, laboratory, practicals...): 100

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