

# Economics Finance and Insurance (LM16)

(Lecce - Università degli Studi)

## Teaching ASSET MANAGEMENT

GenCod A002505

**Owner professor** Paolo Antonio CUCURACHI

**Teaching in italian** ASSET MANAGEMENT

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**SSD code** SECS-P/11

**Reference course** Economics Finance and Insurance

**Course type** Laurea Magistrale

**Credits** 6.0

**Teaching hours** Front activity hours: 48.0

**For enrolled in** 2020/2021

**Taught in** 2021/2022

**Course year** 2

**Language** ENGLISH

**Curriculum** CURRICULUM ECONOMICO

**Location** Lecce

**Semester** First Semester

**Exam type** Oral

**Assessment** Final grade

**Course timetable**

<https://easyroom.unisalento.it/Orario>

## BRIEF COURSE DESCRIPTION

The objective of the course is to analyse quantitative tools and methodologies in order to build robust and efficient portfolios of financial assets. Starting from Markowitz's Modern Portfolio Theory, the course deals with the pitfalls of the traditional optimization procedure and suggests alternative models such as constrained optimization, resampling and the Blak& Litterman approach.

The strategic asset allocation is the first step of the investment process and must be followed by the definition of the investor's risk profile and by an appropriate approach of manager selection. This second step optimization is based on the research of portfolios consistent with the strategic asset allocation and efficient (in a relative risk – return space). Moreover performance evaluation will be presented using an ex post approach (i.e. useful to rank mutual funds) and an ex ante approach

## REQUIREMENTS

Students should know the basic measures of return and risk applied to securities (bonds and equities). Moreover students should be able to manage a time series and to run linear regressions.

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## COURSE AIMS

At the end of the course students will have a full knowledge of the mean-variance portfolio and of the solutions to overcome the pitfalls of the Modern Portfolio Theory. Moreover they will understand the meaning of different measures of return, risk and risk adjusted return applied in the asset management industry as well as the mutlimanagement approach.

Students will be trained to use Excel and Matlab in order to run optimizations (using historical data or personal inputs) and to build a fact sheet of a mutual fund.

### **Risultati attesi secondo i descrittori di Dublino:**

#### Conoscenza e capacità di comprensione (knowledge and understanding):

l'obiettivo del corso è quello di sviluppare un approccio interdisciplinare finalizzato ad integrare le competenze finanziarie con quelle matematico - statistiche e normative che presidono il funzionamento dei mercati finanziari e che regolano il comportamento degli intermediari nei confronti degli investitori nel rispetto delle regole di know your customer e suitability

#### Capacità di applicare conoscenza e comprensione (applying knowledge and understanding):

al termine del corso lo studente deve dimostrare di sapere applicare le nozioni apprese a contesti concreti di ottimizzazione di portafoglio, valutazione dei prodotti di risparmio gestito, misurazione della performance di un portafoglio di attività finanziarie

#### Autonomia di giudizio (making judgements):

il costante riferimento a dati di mercato consente allo studente di confrontarsi con casi concreti e di saper individuare le metodologie di analisi più appropriate.

#### Abilità comunicative (communication skills):

l'obiettivo è quello di far impadronire lo studente di una corretta proprietà di linguaggio economico-finanziario, oltre che di rigore metodologico nell'esposizione dei concetti.

#### Capacità di apprendimento (learning skills):

obiettivo del corso è anche creare una adeguata capacità di inquadramento del processo di investimento in tutte le fasi che vanno dall'asset allocation al monitoraggio del rischio tenendo anche conto delle scelte organizzative che presidono l'assunzione di tali decisioni.

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## TEACHING METHODOLOGY

The course is delivered using traditional lectures and practical sessions using Matlab and Excel. Due to the Coronavirus pandemic the course will be delivered in distance learning.

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## ASSESSMENT TYPE

Written exam (multiple choices, exercises and open questions). The oral exam is optional with +/- 3 marks starting from the evaluation of the written exam

Multiple choice questions are used to check the knowledge of the student; exercises aim at evaluating the ability of the students to use the quantitative tools explained in the course; open questions are useful to evaluate how students make judgements.

There is no difference for not attending students

Due to the Coronavirus pandemic the assessment type will be oral with exercises. A written multiple choice test could be required to be admitted to oral examination.

Lo studente, disabile e/o con DSA, che intende usufruire di un intervento individualizzato per lo svolgimento della prova d'esame deve contattare l'ufficio Integrazione Disabili dell'Università del Salento all'indirizzo [paola.martino@unisalento.it](mailto:paola.martino@unisalento.it)

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## OTHER USEFUL INFORMATION

A web site of the course is available at [formazioneonline.unisalento.it](http://formazioneonline.unisalento.it)

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## FULL SYLLABUS

Asset management: the investment process  
Asset management: the Markowitz MVO  
The constrained optimization  
The resampling model  
The Black & Litterman model  
Practical session on portfolio optimization  
Index construction  
The determinants of performance: the BBS model  
The investor's risk profile: know your customer and suitability  
Portfolio reporting: MWRR versus TWRR  
Practical session on performance measurement  
Performance evaluation: risk measures  
Risk-adjusted measures: the Sharpe ratio and Modigliani index  
Risk-adjusted measures: the Sortino ratio, the Treynor ratio  
Information ratio and selection ratio  
Skill measures: stock picking (Jensen' alpha) and market timing  
Skill measures: market timing (Treynor-Mazuy's gamma), Bull/Bear beta  
Practical session on mutual fund analysis  
Style analysis and peer groups  
Multimanager approach  
Practical session on manager selection  
Assignment  
Assignment

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## REFERENCE TEXT BOOKS

A selection of papers is available on the web site of the course on [formazioneonline@unisalento.it](mailto:formazioneonline@unisalento.it)