

# Fixed income

**EM364U02**

## Program

**PGE**  
PGE 2A - FINANCE - COMPTABILITE

## UE

Track Finance

## Semester

A

## Discipline

Finance

## Contact hours

27 H

## Number of spots

45

## ECTS

5

## Open to visitors

Yes

## Language



## Coordinator

Ali Özdakak



## List of lecturers

Lecturer(s)	Email	Contact hours - lecture
Ali ÖZDAKAK	<a href="mailto:ali.ozdakak@em-strasbourg.eu">ali.ozdakak@em-strasbourg.eu</a>	27 h

## Pedagogical contribution of the course to the program

### **Développer un management à impact grâce aux connaissances et aux outils les plus récents dans les domaines du management**

Developing a strategic and managerial vision in a complex, uncertain and changing environment

Evaluate sustainable managerial practices using managerial concepts and instruments as well as digital tools

Design solutions adapted to organizational problems by applying relevant methodologies

### **Pratiquer un management à impact dans un environnement multiculturel et international, porté par un "European mindset"**

Communicate in a professional context in (foreign) languages, in writing and/or orally

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## Description

Debt securities are often called fixed-income securities because they promise either a fixed stream of income or one that is determined according to a specified formula. Fixed-income securities come in a tremendous variety of maturities and payment provisions. The fixed-income capital market includes long-term securities such as Treasury bonds, as well as bonds issued by federal agencies, state and local municipalities, and corporations.

In this course students will learn the universe of bond markets, including Treasury, corporate, and international bonds. We turn to bond pricing, showing how bond prices are set in accordance with market interest rates and why bond prices change with those rates. Given this background, we compare the different measures of bond returns such as yield to maturity and holding-period return. Furthermore, we examine the so-called term structure of interest rates. In the context of passive and active fixed income strategies we analyze the sensitivity of bond prices to interest rate fluctuations by applying concepts such as bond duration and convexity.

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## Teaching methods

### Face-to-face

- Lectures
- Tutorials

### In group

**No items in this list have been checked.**

### Interaction

- Discussions/debates

### Others

**No items in this list have been checked.**

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## Learning objectives

### Cognitive domain

Upon completion of this course, students should be able to

- - (level 4) **analyze** bond prices and yields
  - - (level 4) **examine** theories of term structure of interest rates
  - - (level 5) **assess** the term structure of interest rates
  - - (level 5) **evaluate** the default risk of corporate bonds
  - - (level 5) **determine** future interest rates
  - - (level 6) **develop** approaches to deal with interest rate uncertainty
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### Affective domain

Upon completion of this course, students should be able to

**None affective domain have been associated with this course yet**

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## Outline

Topic 1: Bond prices and Yields

- Bond characteristics
- Bond pricing
- Bond yields
- Default risk and bond pricing

Topic 2: Term structure of interest rates

- The yield curve
- Future interest rates
- Interest rate uncertainty
- Theories of term structure
- Forward rates

Topic 3: Managing bond portfolios

- Interest rate risk
  - Convexity
  - Passive and active bond management
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**No prerequisite has been provided**

## **Knowledge in / Key concepts to master**

No special knowledge required  
Basic understanding of the discounted cashflow method desired  
Solid math skills required

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## **Teaching material**

### **Mandatory tools for the course**

- Calculator

### **Documents in all formats**

- Syllabus

### **Moodle platform**

- Upload of class documents

### **Software**

- Pack Office (Word, Excel, PowerPoint, Access)

### **Additional electronic platforms**

**No items in this list have been checked.**

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## **Recommended reading**

Main reading material  
None

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Additional literature  
will be provided in class

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### **EM Research: Be sure to mobilize at least one resource**

Textbooks, case studies, translated material, etc. can be entered  
**No reading material has been provided.**

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## Assessment

### List of assessment methods

**Intermediate assessment / continuous assessment 1** Other (date, pop quiz, etc.) : tba

Written (90 Min.) / Individual / English / Weight : 25 %

**Details :** 1st written midterm after completion of Topic 1

**This evaluation is used to measure ILO1.1-PGE, ILO1.2-PGE, ILO2.1-PGE, ILO2.2-PGE, ILO2.4-PGE**

**Intermediate assessment / continuous assessment 2** Other (date, pop quiz, etc.) : tba

Written (90 Min.) / Individual / English / Weight : 25 %

**Details :** 2nd written midterm after completion of Topic 2

**This evaluation is used to measure ILO1.3-PGE, ILO3.2-PGE, ILO4.1-PGE, ILO4.2-PGE**

**Final evaluation** Exam week

Written (90 Min.) / Individual / English / Weight : 50 %

**Details :** Final exam after completion of Topic 3

**This evaluation is used to measure ILO1.1-PGE, ILO1.2-PGE, ILO2.1-PGE, ILO2.4-PGE, ILO3.2-PGE, ILO4.1-PGE**