

## **Instruments market: Fixed Income**

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**Learning Objectives:** The goal of the course is to make students familiar with the main fixed income terminology, basic risk and return concepts, hedging techniques; provide an overview of government and corporate markets in real world.

**Learning Outcome:** The course is focused on analysis and description of bonds markets mechanics. Students will learn how the fixed instruments are priced, what are the risks associated with investing in bonds and how to measure and hedge them; how macro factors influence bond markets. Course would provide an intro to interest rate derivatives. Additionally students would get familiar with main fixed income Bloomberg functions and be able to debug basic Bloomberg calculations.

### **Syllabus:**

1. Core features of debt securities: main bond classifications, participants and markets;
2. Bonds' yield measures and risks;
3. Par, spot and forward curve construction.
4. Basics of interest rate derivatives: forwards and swaps
5. Swap curve construction
6. Market and credit risk: duration and credit spreads
7. Fundamentals of credit risk analysis
8. Bonds with embedded options
9. Bond benchmarks
10. Bond portfolio: construction and hedging
11. International investments. How to compare yields.

**Grading System:**

Final exam accounts for 50%, essay (individually) or presentation (in groups of 2-3 students) - 25%, homework - 25%;

Final exam is open book and consists of multiple choice questions (CFA exam format) and open/essay assignments;

Homework includes tests which need to be solved using financial calculator or MS-Excel;

Essay or presentation: students should pick one of two possible options:

Essay is devoted to the market analysis of any fixed income security; there is no strict format here - students should demonstrate all their knowledge obtained during the course plus be able to use any additional sources such as readings, web, Bloomberg/Thomson Reuters terminal etc.

Presentation should be prepared in groups of 2-3 students. There is a limited number of topics for presentations. At each lecture few groups present their findings to the class in 10-15 minutes speech.

Attendance is not graded.

**Reading List:**

- Frank J. Fabozzi. The handbook of fixed income securities. Seventh Edition
- Schweser CFA Study Notes Level 1, 2, 3
- Pietro Veronesi. The handbook of fixed-income securities