

The Hong Kong University of Science & Technology
Department of Finance

FINA 536: Fixed Income Analysis

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Course Description

This course teaches basic valuation techniques of the traditional fixed-income securities. It begins with basic concepts such as price-yield relationship and alternative definitions of yields, followed by price sensitivity measures (durations and convexities). The next topics are related to spot rates, discount factors, forward rates, par-bond yields, holding period returns, classical theories of term structure of interest rates, credit risk and credit spreads. Yield curve fitting techniques are then discussed which essential for estimating various interest rate curves needed for practical uses. Simple portfolio strategies will be elaborated in details. The course then moves on to the more recent topics on repos and floating rate securities. Both economic intuition and quantitative skills are emphasized.

This course is a required course for the master-of-science (financial analysis and investment management) program and an elective course for master-of-business-administration students who are strongly interested in fixed-income securities with good quantitative skills.

The material learned in this course is useful in the following courses:

FINA557, Fixed Income Derivatives
FINA538, Raising Debt in the Financial Markets
FINA543, Credit Risk Management
FINA517, Asset Securitization

Recommended References

Martellini, L., Priaulet, P. and Priaulet, S., 2003, *Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies*, The Wiley Finance Series.

Suresh Sundaresan, 2009, *Fixed Income Markets and Their Derivatives*, 3rd edition, Academic Press.