

**2013/2014**

**PROJECT EVALUATION**

**PROGRAM**

**Chapter 1 – Basic Concepts**

1. Notion of Real Investment
2. Analysis of Real Investments
3. Opportunity Cost of Capital
4. Uncertainty and Future Financial Flows
5. Financial Flows and Incremental Logic
6. Net Present Value – NPV

**Chapter 2 – Investment and Entrepreneurial Strategy**

1. Preliminary Aspects
2. Strategic Process
3. Strategic Process and Investment Analysis
4. *Case Study*

**Chapter 3 – Capital Investment**

1. Basic Notion of Capital Investment
2. Physical Capital – Asset
3. Working Capital
4. Residual Value
5. Physical and Financial Maps
6. Investment Duration
7. Importance of Strategic Analysis
8. *Case Study*

**Chapter 4 – Financial Flows of Investment**

1. Strategic Analysis and Activity Level
2. Capital Budgeting
3. Financial Statements
4. General Conditioning of Financial Flows
5. Operational Cash-Flow and Global Cash-Flow
6. Flow of Cash, Free Cash-Flow and Global Cash-Flow of Shareholders
7. *Case Study*

## **Chapter 5 – Investment Finance**

1. Investment Decision and Financial Decision
2. Level of Indebtedness and Cost of Equity and Debt
3. Capital Structure Decision – Classic Vision
4. Capital Structure Decision – Other Visions
5. Dividend Policy and Capital Structure
6. Cost of Invested Capital
7. *Case Study*

## **Chapter 6 – Project Selection**

1. Evaluation Models – NPV, IRR, MIRR, Payback Period, IR, APV
2. Sequential NPV Profile
3. *Case Study*

## **Chapter 7 – Decision under Uncertainty**

1. Uncertainty and Risk
2. Incorporation of Risk in Investment Analysis
3. Sensitivity Analysis
4. Scenarios Analysis
5. *Case Study*

## **Chapter 8 – Inflation in Investment Analysis**

1. Basic Concepts – Inflation, Uncertainty and Discount Rate
2. Inflation Impact on Investment Analysis
3. Additional Notes About Inflation Impact

### **BASIC BIBLIOGRAPHY:**

**Crundwell, F. K. (2008). *Finance for Engineers Evaluation and Funding of Capital Projects*, Springer.**

### **Additional Bibliography:**

Benninga, S. (2006), *Principles of Finance with Excel*, Oxford University Press, UK.

Brealey, R., Myers, S. and Allen, F. (2011). *Principles of Corporate Finance*, 10/e, McGraw-Hill.

Callahan, Kevin R., Stetz, Gary S. and Brooks, Lynne M. (2007). *Project Management Accounting*, John Wiley & Sons, USA.

- Damodaran, Aswath (2002), *Investment Valuation*, Second Edition, John Wiley & Sons, USA.
- De Thomas, Arthur R. and Gensing-Pophal (2001), *Writing a Convincing Business Plan*, Second Edition, Barron's Business Library, USA.
- Hirst, Ian R. C. (1988), *Business Investment Decisions*, Philip Allan Publishers, UK.
- Ibrahim, M. and Fontainha, E. (2014, *forthcoming*) *Project Evaluation*. In Alex Michalos (Ed.), *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht, Netherlands: Springer Publishers. ISBN 978-94-007-0752-8
- Khatib, Hisham (2003). *Economic Evaluation of Projects in the Electricity Supply Industry*, Institution of Electrical Engineers, UK.
- Koller, T., Goedhart, M. and Wessels, D. (2010), *Valuation: Measuring and Managing the Value of Companies*, 5th Edition, McKinsey & Company Inc.
- Kurowski, L. and Sussman, D. (2011), *Investment Project Design: A Guide to Financial and Economic Analysis with Constraints*, John Wiley & Sons, USA.**
- Proctor, K. Scott (2004), *Building Financial Models with Microsoft Excel*, John Wiley & Sons, USA.
- Soares, I., Moreira J., Pinho, C. e Couto J. (2012). *Análise Financeira de Projectos*, 3<sup>a</sup> Ed, Edições Sílabo, Portugal.**
- Tennent, J. and Friend, G. (2005), *Guide to Business Modelling*, Second Edition, The Economist and Profile Books, UK.