# Course Unit Description - (ANPI)

(Investment Project Analysis)

(Mestrado em Engenharia Electrotécnica e de Computadores)

Academic year: 2009/2010



## Subject group: Gestão

	Semestral	Compulsory		
Mode of study	Diurno	Hours/Week	T-Teórica	2
Year	10		PL-Prática-Laboratorial	2
Semester	1 <sup>0</sup>		OT-Orientação Tutorial	1

ECTS 6

#### Objectives

To offer to the students the possibilities to acquire abilities, in order to understand and estimate financial variables, that can be in consideration in the process of investment taking.

To enable students with fundamental concepts of entrepreneurial finance, endowing them with abilities of understanding and searching, in order to achieve and select relevant information to the analysis of investment capital projects and operational management.

To develop students feeling to evaluate the impacts of investment financing decisions and inflation effects in capital costs.

To become the students used to the distinction between the investments without risk from venture investments and to establish and graduate different risk degrees.

To afford the students with knowledge about some methods of investments projects evaluation, having always in consideration that given data will be obtained with some level of uncertainty.

To instill into student's mind adequate manners to analyse specific cases and problems and to create appropriate methodologies to its scope

#### **Course Contents**

I-INVESTMENT ANALYSIS ELEMENTARY CONCEPTIONS (1 WEEK)

II-PROJECTS NON FINANCIAL ASPECTS (1 1/2 WEEKS)

III-INDISPENSABLE REQUISITES TO FINANCIAL EVALUATION OF AN INVESTMENT PROJECT (4 WEEKS)

IV-FINANCIAL ANALYSIS OF AN INVESTMENT PROJECT (1 1/2 WEEKS)

V-CRITERIA FOR ECONOMIC AND FINANCIAL EVALUATION OF INVESTMENT PROJECTS (3 WEEKS)

VI-FINANCING/ COST OF PROJECT STOCK (1 WEEK)

VII-RISK AND UNCERTAINTY ANALYSIS IN ALTERNATIVE PROJECTS CHOICE ( 1 WEEK)

VIII-THE IMPACT OF INFLATION IN INVESTMENT ANALYSIS (1 WEEK)

IX-COMPLEMENTARY QUESTIONS IN INVESTMENTS ANALYSIS (1 WEEK)

### Recommended reading

Recommended books to the different syllabus chapters : I- ENTREPRISE FINANCIAL ANALYSIS a)–NABAIS, C., F. Nabais, Prática Financeira I – Análise Económica e Financeira, 2<sup>a</sup>. Edição, LIDEL, 2005 b)-NABAIS, C., F. Nabais, Prática Financeira II - Gestão Financeira, LÍDEL, 2005 c)-CARVALHO, C. N., G.M., Análise Económico Financeira de Émpresas, 3ª. Edição, Universidade Católica Portuguesa, 2005 d)-CARRILHO, J.M. e outros, Elementos de Análise Financeira - Casos Práticos, Publisher Team, 2005
e)–BREALEY, R.A.; S.C.Myers, Principles of Corporate Finance, 8th Edition, McGraw-Hill, 2006 **II- BUDGETING PRINCIPLES** a)- PARENTEAU J., CONTROLO DE GESTÃO pelo MÉTODO b)-SECRETT, Malcom, ORÇAMENTAR COM SUCESSO, Editorial Presença, 1994, Lisboa **III- ESSENCIALS OF FINANCIAL MATHEMATICS** a)-SANTOS, L.L.; R.L., Fundamentos e Aplicações do Cálculo Financeiro- Casos Práticos; Edições Sílabo, 2003 b)-MATIAS, R., Cálculo Financeiro, Teoria e Prática, Escolar Editora, 2004 IV- INVESTMENTS ANÁLISYS AND EVALUATION a)-BARROS, H., Análise de Projectos de Investimento, 4<sup>a</sup>. Edição, Edições Sílabo, 2002 b)-BARROS, C., Decisões de Investimento e Financiamento de Projectos, 3ª. Edição, Edições Silabo, 2000 c)-CEBOLA, A., Elaboração e Análise de Projectos de Investimento -Casos Práticos, Edições Sílabo, 2000 d)-PORF[R[0,J.A., G. Couto, M. M. Lopes. Avaliação de Projectos – da Análise Tradicional às Opções Reais, Publisher Team, 2004 e)- MARQUES, Albertino, Concepção e Análise de Projectos de Investimento, 3ª. Edição, Edições Sílabo, 2006, Lisboa

f)-BARATA, Joaquim Martins, Elaboração e Avaliação de Projectos, 1ª, Edicão, Celta Editora, 2004, Lisboa, g)-SOARES, Isabel, [et al.], Decisões de Investimentos, Análise
Financeira de Projectos, 1<sup>a</sup>. Edição, Edições Sílabo, 2007, Lisboa
h)- MIGUEL, António, GESTÃO MODERNA DE PROJECTOS, 1.<sup>a</sup> Edição, FCA, 2006, Lisboa.

Above bibliography will be complemented with notes and exercises to be let out by the teacher during academic semester.

#### **Teaching Methods**

The Teaching/Apprenticeship of planned syllabus will take place through:

1)- Theoretical presentation

Introduction, interpretation and thematic framing of contents, in appropriate linking with illustration of small examples and resolution of elementary exercises that shows clearly and explain the main concepts

Linkage of explanation and exemplification with the classroom discussion of pupils experiences or of study cases developed to its purpose.

2)-Theoretic - Practical Aplication

To be developed supported in examples, exercises and application cases related to the exposed contents to be subjected to individual and collective into classroom, with analysis and reflection of alternative hypothesis and theirs potentials effects experienced situations. As much as possible, practical work will be based in project themes that have been begun and in action in other course

Some working lessons will be based or supported under discussion of cases or exercises introduced by the pupils and in the comparison of eventual alternative solutions or options possibilities and its consequences

The study of practical cases and its results shall permit to confirm the apprenticeship progression and pupils knowledge strengthening. We will try, as much as possible, to diversify apprenticeship technical frames, by using more computer resources and others appropriate tools.

3)-Individual's or in Group Practical Works

As a complement of theoretic- practical lessons, specific Works will be distributed to the pupils to be developed out of classroom, under well defined schedule and guidelines to be presented and discussed in classroom. That individual Works can be developed under themes proposed by the pupils and elaborated according to a standard-bearer provided by teacher or suggested by pupils

and accepted by the teacher

#### Assessment methods

Students will be evaluated during the course by

-Two intercalary tests to carry out at the middle of semester that will fall upon given lessons, up to it take place. The contribution of these tests to the final mark is 50% (2x25%)

Written tests about course contents, with open theoretic questions and practical questions with some specific concepts applications. These tests will be held in week 8 and in week 14/15, respectively The study effort, plus classroom, will be about two hours per week

-Two practical works to be developed by student's group (2 or 3 pupils per group) with teacher tutorial support, to be fulfilled during semester classes time. This two practical works represents 50% of course final mark and the mark of each team member can be different of other, depending of teacher assessment during working sessions and final appreciation of reports and students participation.

The practical works will develop some concepts of the course contents and will need some external search and study, like bibliographies, internet or into companies connected with the works, and must be explained and justified in the classroom by each group.

This practical works will be initiated at weeks 1 and 9 and have to be completed at weeks 8 and 15, respectively

The additional time needed for this works - extra classroom participation - will be about two hours per week, it means 16 hours per each practical work.

Remarks:

1-Practical works are compulsory for all students

2-The student's required effort for this continuous assessment program, plus than classroom assistance and participation, is about four hours per week of effective work, including tutorial assistance.

At the end of semester

Students with continuous assessment that haven't reached the minimum mark, will have an examination test at recurrent or special period composed by questions that cover course program. This test will count with 50% to final mark.(they cannot be assessed at normal examination period)

Worker students and others exempted of continuous assessment, since they have required it, in accordance with specific assessment regulations, will be assessed by practical works and a final test by normal or recurrent examination period, that represent 50% of final mark.

Final mark of the course (  $x \mbox{NFREQ}$  +  $y \mbox{PE}$  ) (x + y)x = 1,00 Min NFREQ = 10 marks

v = 0.00 Min PE = 0 marks

or (if exempted of continuous assessment or if haven't reached minimum mark)

Final mark of the course ( zNFREQ + wPE)

(z+w)z = 0,50 Min TP = 10 marks w = 0.50 Min PE = 10 marks

	Name
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