Applied Methods in Financial Management

Course Outline

1. General

SCHOOL	School of Finance and Statistics		
ACADEMIC UNIT	Department of Banking and Financial Management		
LEVEL OF STUDIES	Postgraduate Program		
COURSE CODE	ΜΕΧΔΟ103	**SEMESTER**	1st
COURSE TITLE	Applied Methods in Financial Management		
INDEPENDENT TEACHING ACTIVITIES		**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures (Total Hours)		39	7,5
COURSE TYPE:	Skills Development		
PREREQUITE COURSES:	None		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS:	No		
COURSE WEBSITE (URL)	https://bankfin.unipi.gr/mathimata/xddom-efarmosmenes-methodoi-sti-xrimatooikonomiki-dioikisi		

2. Learning Outcomes

Learning Outcomes

The degree of utilization of the possibilities provided by computers is a particularly important factor for the effective and timely operation of both public sector companies and services.
The course ''Applied Methods in Financial Management'' presents methods of analysis and presentation of data and forecasts using computers and aims at significantly assisting in the process of making decisions of a financial nature. The design of the course follows the development of the concepts presented in the course ''Principles of Economic Theory and Financial Management'', while at the same time methods of applying these concepts with the use of Microsoft Excel are taught.
Particular emphasis is placed on the application of methods by students during the course, while the face-to-face lecture takes place in the computer lab of the Department of Banking and Financial Management of the University of Piraeus. The applications that are presented during the lectures take advantage of the capabilities of functions provided by Excel, the creation of charts, but also the use of data tables and lists.
Special emphasis is also placed on the correct design of the worksheet. Using the appropriate functions, applications will be presented in a significant range of topics, such as the calculation of future capital value, compound interest, the calculation of present and net present value of future cash flows, the calculation of the internal rate of return of a series of cash flows, the calculation of amortization installments, the choice between different projects, etc.

General Competences

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Adapting to new situations
- Decision-making
- Working independently
- Team work
- Working in an international environment
- Working in an interdisciplinary environment
- Criticism and self-criticism
- Production of free, creative and inductive thinking

3. Syllabus

Introduction to Microsoft Excel

1. Cell manipulation and configuration
2. Tables
3. Charts
4. Basic Functions
5. Lookup and Matching functions in Excel
6. How to create and use Lists

Excel Applications for Financial Decision Making regarding the Time Value of Money

1. Calculation of Future Capital Value with the FV function
2. Calculation of Present Capital Value with the function PV.
3. Net Present Value and NPV function
4. Calculation of internal rate of return using IRR function
5. Calculate loan installments with PMT function
6. Using the Goal Seek function and apps
7. Use the NPER function to calculate the periods required to repay a loan with fixed installments and interest rate

Excel applications for the investigation of the relationship between the Time Value of Money and the internal rate of return

1. Calculate individual installments with IPMT and PPMT functions
2. The use of the Rate function to calculate an interest rate
3. Applications in leasing issues. Comparison of leasing and purchase with lending
4. Continuous compound interest and the Exp function

Excel Applications in Capital Investment Budgeting

1. Application of the Net Present Value rule and internal rate of return for the evaluation of investments and projects.
2. Taking into account taxes in the calculation of cash flows
3. Taking into account residual values

Treatment of problems in Capital Investment Budgeting

1. The case of multiple internal rates of return
2. Use Excel to choose between projects with different maturities
3. Comparison of leasing and purchase with borrowing under the existence of taxes. XNPV function
4. Taking into account cash flows in the middle of periods and the XIRR function
5. Include inflation to calculate real cash flows. Comparison with nominal values

4. Teaching and Learning Methods - Evaluation

<table>
<tr><td>DELIVERY</td><td>Face-to-face and distance learning</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</td><td>Use of synchronous distance learning environment. Powerpoint presentations. Use the Microsoft Excel application. Use of the Laboratory's Computers by students for applications on the course material. Support of the learning process through the e-class platform</td></tr>
<tr><td>TEACHING METHODS</td><td>
<table>
<tr><th>Activity</th><th>Semester Workload</th></tr>
<tr><td>Lectures</td><td>39</td></tr>
<tr><td>Independent Study</td><td>109,5</td></tr>
<tr><td>Assignments</td><td>39</td></tr>
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<tr><td>Course Total</td><td>187,5</td></tr>
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<tr><td>STUDENT PERFORMANCE EVALUATION</td><td>Summative and conclusive assessment is carried out in Greek or English. The final evaluation of students is done through an oral examination in a thesis and a written examination. The work contains the application of concepts taught using data. The written exam is based on problem solving, short answer questions and development questions.</td></tr>
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5. Attached Bibliography

-Suggested Bibliography

- Principles of Finance with Excel 3rd Edition, by Simon Benninga and Tal Mofkadi, Oxford University Press
- Lecture notes and material provided by the Tutor.

-Related Academic Journals