Financial Modeling in Excel

Module 1, 2017-2018

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Course description

The course is dedicated to practical experience in Excel that is useful for modeling.
Problems collected from real applications used in different industries.

Course requirements, grading, and attendance policies

Prerequisites: Laptop to perform exercises (better English version of Excel for Windows).

The course grade consists of:

1) 10% – commitment on project (topic selection) till September 19.
2) 45% – 3 homework assignments (15% each) after week 1 - week 3.
3) 45% – individual project on Excel modeling with presentation in class

Course contents

1 **(Sep 12)** HA#1 till Sep 19	Formulas in Excel 1. Shortcuts (excel without mouse), names. 2. Specification and design of models, useful hints 3. Basic Excel functions (string, vlookup, offset, indirect) in Use 4. Array formulas (matrix formulas for regression) and pivots
2 **(Sep 26)** HA#2 till Oct 3	VBA 1. Syntaxes, main objects, user defined functions 2. Recorder, debugger 3. Events and popular macros (scenarios, calculation)
3 **(Oct 10)** HA#3 till Oct 17	Tools in Excel 1. Data import (from web, file links, macros) 2. Database management (relations, storing, editing, navigation) 3. Linear programming problem (solver), operation management models 4. Random variables, stochastic methods, Monte-Carlo simulations, VaR
4 **(Oct 24)**	Student project presentation (3 minutes per student). Additional topics in Financial Modeling

Description of course methodology

"Once any procedure in Excel takes too much time, you do it in a wrong way."
Study material and problem sets will be published a week before the lecture.
Homework should be done not later than a week after the lecture.
In classes there will be case discussions and answers for your questions you have at work.

Personal projects

Till September 19 students should choose the project topic and comply with lecturer.
Project presentation will be on October 24.

Additional reading

cpearson.com/Excel/Topic.aspx, contextures.com/tiptech.html, http://peltiertech.com/

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.