



Department:

Economics and Finance

Course Name:	Financial Modeling	Course No.:	FIN 631
Prerequisite:	N/A	Credit Hours:	3

Brief Description:

The way we perform financial analysis has been transformed buy the availability of the PC-based spread sheet programs such as Microsoft's Excel and add-in programs that complement Excel, including Crystal Ball. These programs have increased the speed and reliability with which we can do conventional financial analysis and have put time-consuming and often tedious work – including simulation and optimization – building and financial theory. This course will provide students with the skills toward this end. within reach of students of finance. Financial professionals today need sound knowledge of financial model

Course Objectives:

By the end of this course students will be able to:

- 1. understand formulas, functions, and commands of Excel for financial calculations.
- 2. confidently apply finance theory and concepts to construct spreadsheet models.
- 3. gain hands-on experience in designing and implementing their own financial models.
- 4. develop competencies needed to function well in teams.

Course Topics:

- Second Se
- > Financial functions: Time value of money and basic valuation.
- Portfolio Models Introduction.
- Calculating Efficient Portfolios
- Calculating the Variance-Covariance matrix
- Estimating BETA and Security Market Line (SML)
- Options: Introduction
- The Log-normal distribution, the black-Scholes model

Text Book:

- 1. Financial Modeling, 4th Edition, by Simon Benninga (acronym SB) MIT Press, 2014, ISBN 978-0-262-02728-1
- 2. Mills, T. C., & Markellos, R. N. (2008). The econometric modelling of financial time series. Cambridge University Press

Additional References:

- Thomson Reuters DataStream terminal (access can be provided by the lecturer);
- Bloomberg terminal (access can be provided by the lecturer).

Online Resources:

Software Software ■ Excel Software ■

Extra credit for

Measurement & Assessment Tools:							
Objectives			Obj 1.1 &1.2	Obj 2.1	Obj 3.1	Obj 4.2	
Assessment tools	Grade	Week (Time period)	1	2		3	
Midterm Exam	20	9 th	*				
Case Study	15	Monthly			*		
Project	15	15 th		*			
Assignment	10					*	
Final exam	40	As Dated	*				
Total	100						

Tenta	Tentative Course Outline:		
Week	Hours	Topics	Readings
1	3	Excel Basic features and functions.	
2	3	Financial functions: Time value of money and basic valuation.	
3	3	Portfolio Models - Introduction.	
4	3	Calculating Efficient Portfolios	
5	3	Calculating Efficient Portfolios	
6	3	Calculating the Variance-Covariance matrix	
7	3	Calculating the Variance-Covariance matrix	
8	3	Estimating BETA and Security Market Line (SML)	
9	3	Estimating BETA and Security Market Line (SML)	
10	3	Estimating BETA and Security Market Line (SML)	
11	3	Options	
12	3	Options	
13	3	The Log-normal distribution, the black-Scholes model	
14	3	The Log-normal distribution, the black-Scholes model	
15	3	Revision	
16	3	Revision	

Approved by Dept. Chair: Dr Fahad Al Mohaimeed

Date of Approval: -----

Extra Information: (Updated every semester and filled by course instructor)

Course Instructor:	
Office No:	
Extension:	
Email:	
Office Hours:	
