

King Fahd University of Petroleum and Minerals College of Industrial Management Department of Finance & Economics

Computer Applications in Finance – FIN 425 Section(s) 01(02)

Course Syllabus – Fall 2012

Instructor's Information

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Office hours: UT 10am-11am, 2:30pm-3:30pm, and/or by appointment

To set up an appointment with me, please send me an email <u>at</u> <u>least</u> 48 hours before the meeting time. Explain in the email in as much detail as you can about what you would like to discuss

with me.

Teaching Philosophy: 1) learning can be fun 2) theories are taught to be *applied* in real

life 3) the best way to learn is to try

Mode of communication: I respond very well to emails as long as you follow the following

instructions:

 All e-mails must originate from your KFUPM e-mail account and use the following title format: FIN425-

section Name-Subject

(e.g., FIN425-01 Hesham Merdad-question on

homework # 3).

 As a general rule, if I don't reply to your email in two days, I did not receive it. In that case you need to re-send

the e-mail again.

Blackboard is an official communication platform. It is <u>your</u> responsibility to watch for announcements and

emails on a daily basis.

Course Information

Course Title: Computer Applications in Finance (Financial Modeling)

Course Code: FIN 425 (3 credit hours)

Section 01 (CRN 10540) Section 02 (CRN 15104)

Class Time: Section 01 UT 8:30 am to 9:45 am, Bld 24 room 236

Section 02 UT 1:10 pm to 2:25 pm, Bld 24 room 236

Book: Financial Analysis with Microsoft Excel

5th edition by Timothy R. Mayes & Todd M. Shank

South Western Publication 2010

Supplements: Financial calculator such as Taxes Instruments BAII *PLUS*. ¹

Skills needed: Good computer skills, analytical and critical thinking skills

Course Description: This course is an application of computer software in

formulating and analyzing problems in finance.

• Thus, encourages the use of sensitivity and "what if" projections in: financial statement analysis, capital budgeting, cash flow projections, risk analysis, working capital management, capital structure, financing decision, leasing, foreign exchange forecasting, valuation of securities, investment analysis and portfolio management, and applications of quantitative methods in finance.

 Also, develops and implements practical financial modeling skills for purposes of financial planning and decision making. The course is intended to enhance student skills in the development of various types of spreadsheet-based financial models.

Learning Objectives:

1. To reinforce fundamental principles and theories of finance learned in FIN 301 and FIN 302 using excel.

2. Lean and develop spreadsheet-building skills in order to encourage students to think and truly understand the problems on which they are working rather than just using "plug and go" templates.

Prerequisites: This course assumes successful completion of FIN 302

Justification: This is a compulsory course for Finance major and an elective

course for other CIM majors to fulfill the part of the program

objectives

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¹ It is expected by now that all of you master the usage of the calculator. Thus, in this course, there will be no great emphasis on the calculator because almost all calculations will be done using spreadsheets. However, it is recommended that you bring your calculators with you in every class in case we need to do any calculations. Any calculator that has an IRR function will do and I will post relatively brief, course-specific manuals for the leading calculators.

Expectations:

The material demands honest effort to be able to get a good grade. Three "disciplines" will serve you well in this class:

- 1- Attend class and make sure you understand what has been taught that day.
- 2- Read the assigned sections/lecture notes prior to each class session.
- 3- Review the material on a regular basis and solve all assigned and in-class-problems.

Learning Outcomes:

To develop and implement practical financial modeling skills for purposes of financial planning and decision making

To achieve hands on experience to arrive at solutions to many financial problems through pre-packaged computer aided finance programs

To understand the theory and practice of financial management

Grading

- The final letter grade will be based upon two exams, an individual/group term project (in replacement of final exam), homework assignments, class attendance and participation & involvement.
- The exams will be open book and open notes. You can use everything but others work.
- All submissions including exams, homework and term projects have to be through Blackboard under their respective ONLINE SUBMISSION folder, *no exception*.
- The final course grade will be determined as per the weights specified below.

Grade Breakdown (Grades are computed using a weighted average):

Attendance and Participation (A&P)	10%
Homework	20%
Exam I	20%
Exam II	20%
Group Term Project	30%
Total	100%

Letter Grade and points (maximum point available is 1000)

95 and above	4.00	A+
90-94	3.75	A
85-89	3.50	$\mathbf{B}+$
80-84	3.00	В
75-79	2.50	C+
70-74	2.00	C
65-69	1.50	D+
60-64	1.00	D
Below 60 pts	0.00	F

Homework Assignments

Guidelines:

- Homework problems will be assigned on a regular basis.
- Any homework assigned is automatically due the next week on the first day of class.
- All homework assignments have to be submitted through *Blackboard* under the *HOMEWORK ASSIGMENT folder*.
- All assignment questions have to be answered in detail by applying the necessary tools/actions to get full credit. Simply writing/inserting the answer into cells will not be credited.
- The policy of not accepting late submissions of homework assignment is strictly enforced.

Exams

Guidelines:

- Look at tentative schedule for exams (1&2) expected dates. Note that dates are subject to change.
- All exams will be performed online in given time slots and have to be submitted through <u>Blackboard</u> under the <u>EXAM1</u> and EXAM2 folders.
- All exam questions have to be answered in detail by applying the necessary tools/actions to get full credit. Simply writing/inserting the answer into cells will not be credited.
- The policy of not accepting late submissions of exams is strictly enforced unless there was an excused absent (see General Notes section below for what constitutes an excused absent)

Group Term Project

About the Group Term Project:

- The group term project is intended to replace the final exam.
- The group will make a detailed financial analysis limited to the concepts and tools covered in this course. Thus, each report is expected to illustrate all the relevant functions of Microsoft Excel taught in class.
- The aim of the project is to familiarize students with the information sources on internet and/or in the market and to apply the techniques and methods gained in classes on the real life financial data of a company, which will be chosen by the group.

The formation of the Group

- There will be two/three students in each group and members of each group will be determined by the instructor.
- The instructor will form new groups for those who do not find groups.

Students Responsibilities

- Each group is required to gather all the relevant information about the company.
- Each student in the group will contribute to the project by taking the responsibility of some part of the final report.
- Each member of the group will evaluate the contribution of the other member of the group by filling out the questionnaire given by the instructor after the group presentation.

- Each group is required to submit 1-page introductory report on (<u>Sunday Nov. 4, 2012 after Eid Aladha break</u>) in which the group will give very basic financial facts about the company.
 - It is very much recommended not to decide the company before doing a cautious research about the data availability because the group cannot change the company later.
- Each group will make a short presentation followed by a "question and answer" section.
 Each student has to make partial presentation and answer the questions asked by either the instructor or students.
- **<u>Before</u>** the group presentation, the group should submit all related documents through **<u>Blackboard</u>** under the **<u>GROUP TERM PROJECT folders</u>**. Hardcopy is required on presentation day in addition to the submitted softcopy.
- It is the responsibility of each group to be ready to present and submit related documents on the due date on which we agree. However, if for any reason the group could not present on their due date, it is each group responsibility to arrange with other groups to present on their due date.

Supplements

• You will be given additional handouts explaining the nature and the details of the project.

General Notes

Participation and Attendance:

Attendance is highly recommended and monitored. I urge you to not miss any lecture. This is a highly practical course. In each class we will do problems that are much easier to understand if you work on them in class. In class, I will explain concepts, do some practical problems, and then ask you to do problems at your own while I am around to answer any question you may have. Constructive participation is welcomed and encouraged and likely rewarded with extra credits.

Generally speaking, 2 excused absences and 1 unexcused absence (during the entire semester) will be tolerated. Excessive absences will harshly penalize. Also, 2 late attendances are considered as 1 unexcused absent. *Finally, be aware that a grade of DN will be reported for six* (6) or more non-excused absences.

<u>What constitutes an excused absence?</u> Situations beyond the student's control (such as a medical excuse, jury duty, death in the family or automobile accident). In such case, the student should present documentation from the university (student affairs) and/or the clinic to support his excused absent.

Make-up Examination:

Make-up exams will <u>NOT</u> be allowed except in situations beyond the student's control (such as a medical excuse, jury duty, death in the family or automobile accident). In such case, the student should inform me through email, telephone, and/or text of the situation <u>before the exam time</u>. Later, the student should provide a written and signed statement concerning the reason for missing the exam along with the appropriate original documentation obtained from the university or the clinic, which is applicable. <u>Note that there will be NO make-ups for homework and quizzes.</u>

Academic Dishonesty:

Academic dishonesty will not be tolerated. Academic dishonesty includes, but is not limited to, the following: cheating, plagiarism, tampering with academic records and examinations, falsifying identity, and being an accessory to acts of academic dishonesty. Refer to the KFUPM Judicial Code for further information. The Code is available online via the KFUPM webpage (www.kfupm.edu.sa).

Plagiarism: The unacknowledged inclusion of someone else's actual words, ideas or data as one's own, or the paraphrasing of someone else's words, ideas or data. This means that sources of information must be appropriately cited with footnotes or quotation marks and identified, whether published or unpublished, copyrighted or un-copyrighted.

Students with Disabilities:

It is university policy to provide reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities. Students with disabilities are encouraged to contact the instructor in order to discuss their individual needs for accommodations.

I wish you good luck and much success and enjoyment in this class

Tentative Course Schedule

	Date	Week	Class	Chapter	Class Lecture/Discussion/Exercises	
Sun	2-Sep-12	1	1	Ch1	Overview and Introductoin to Excel Basics	
Tue	4-Sep-12	1	2	Ch1	Overview and Introductoin to Excel Basics	
Sun	9-Sep-12	2	3	Ch2	The Basic Financial Statements	
Tue	11-Sep-12	2	4	Ch3	The Cash Budget	
Sun	16-Sep-12	3	5	Ch3	The Cash Budget	
Tue	18-Sep-12	3	6	Ch4	Financial Statement Analysis Tools	
Sun	23-Sep-12	4		Holiday1	National Day	
Tue	25-Sep-12	4	7	Ch5	Financial Forecasting	
Sun	30-Sep-12	5	8	Ch6	Break-even and Leverage Analysis	
Tue	2-Oct-12	5	9	Ch6	Break-even and Leverage Analysis	
Fri	5-Oct-12	5		Ex1	Exam1 Starts 7pm, deadline 9pm	
Sun	7-Oct-12	6	10	Ch7	The Time Value of Money	
Tue	9-Oct-12	6	11	Ch7	The Time Value of Money	
Sun	14-Oct-12	7	12	Ch8	Common Stock Valuation	
Tue	16-Oct-12	7	13	Ch8	Common Stock Valuation	
Sun	21-Oct-12	8		Holiday2	Eid Aladha	
Tue	23-Oct-12	8		Holiday2	Eid Aladha	
Sun	28-Oct-12	9		Holiday2	Eid Aladha	
Tue	30-Oct-12	9		Holiday2	Eid Aladha	
Sun	4-Nov-12	10	14	Ch9	Bond Valuation & submit 1-page firm into	
Tue	6-Nov-12	10	15	Ch9	Bond Valuation	
Sun	11-Nov-12	11	16	Ch10	The Cost of Capital	
Tue	13-Nov-12	11	17	Ch10	The Cost of Capital	
Sun	18-Nov-12	12	18	Ch11	Capital Budgeting	
Tue	20-Nov-12	12	19	Ch11	Capital Budgeting	
Sun	25-Nov-12	13	20	Ch12	Risk and Capital Budgeting	
Tue	27-Nov-12	13	21	Ch12	Risk and Capital Budgeting	
Sun	2-Dec-12	14	22	Ch13	Portfolio Statistics and Diversification	
Tue	4-Dec-12	14	23	Ch13	Portfolio Statistics and Diversification	
Fri	7-Dec-12	14		Ex2	Exam2 Starts 7pm, deadline 9pm	
Sun	9-Dec-12	15	24	Proj	Group Project Presentations	
Tue	11-Dec-12	15	25	Proj	Group Project Presentations	
Sun	16-Dec-12	16	26	Proj	Group Project Presentations	
Tue	18-Dec-12	16	27	Proj	Group Project Presentations	
Sun	23-Dec-12	17	28	Proj	Group Project Presentations	
Tue	25-Dec-12	17	29	Proj	Group Project Presentations	
Sun	30-Dec-12	18		Final Exam Preparation Break		
Tue	1-Jan-13	18		Final Examination Starts		

Note: The instructor reserves the right to make changes to the requirements and schedule.