**Course Syllabus**

**Spring 2025**

**Sarah Khalaf**

**FIN 340 – Financial Models**

**Lecture Time and Location**

**Section 01**: M/W at 11:00 AM to 12:15 PM. Location: Financial Trading Center - B1 Room 1031

**Contact Information**

**Location** : Department of Finance & Financial Institutions – Area B – 4th Floor

**Email** : sarah.khalaf@ku.edu.kw

**Office** : 4th Floor B - 1035

**Office Hours** : M/W 12:30 PM – 1:30 PM or by appointment

**Teaching Assistant**

**Name** :

**Location** : 4th Floor Area B

**Email** :

**Office Hours** :

**Tutorial** :

**Course Description**

The course is devoted to teaching the students the different equity valuation methods & techniques that that measure the value of a company, given its current assets and position in the market. The course will primary focus discounted dividend model, free cash flows model and value-based models.

**Course Learning Objectives**

Upon successful completion of the course, students will be able to:

1. Understand the different types of valuation models and the assumptions behind them.
2. Use Microsoft Excel to create models to value assets.
3. Use Microsoft Excel financial functions to solve financial problems.
4. Use Microsoft Excel What-if Analysis functions (Data Table, Solver, Goal Seek) to solve financial problems.
5. Use capital budgeting methods (i.e., NPV, IRR, MIRR, PBP, etc.) to solve financial problems.
6. Use time value of money concepts to value the price of common equity and bonds.
7. Construct an efficient frontier using excel.

# CLO Mapping to CBA Skill Based Competency Goals[[1]](#footnote-1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CLO | Competency Goal | | | | |
| Analytical | Communication | Information Technology | Business Ethics |
| 1 | R |  |  |  |
| 2 |  |  | I |  |
| 3 |  |  | I |  |
| 4 |  |  | I |  |
| 5 | R |  |  |  |
| 6 | R |  |  |  |
| 7 | R |  |  |  |

# Type of Emphases:

* **(I)ntroduce:** Students will be introduced to the skill and their grasp of it assessed in the course.
* **(A)pply:** The course will not cover the skill. Students should have a high-level grasp of the skill and are required to apply it in the course.
* **(R)einforce:** Students should have an introductory-level grasp of the skill and the course will improve their mastery to a higher level.

**Prerequisites**

FIN 220 Principles of Financial Management

**Required Material:**

**Textbook** : Benninga, S. (2014). Financial modeling (4th ed.). The MIT Press.

**Additional Material** : Slides and Practice Problems

**E-Learning System**: Moodle and Microsoft Teams

**Course Requirements and Policies**

**Participation:** Participation, along with attendance, counts for 10% of your final grade. Coming prepared to class and solving on the computer or your laptop will enable you to effectively contribute to the discussions. Some of our classes will be held in the trading room and you are expected to follow the examples solved. You will be asked to upload your lab work at the end of each class. You will receive zero participation points if you do not upload your work. See attendance instructions below.

**Midterm:** There will be **two** in-class examinations that are 75 minutes each. Each midterm will count towards 30% of your final grade. Use the in-class examples for each chapter, in addition to the assignments, as a way to prepare for the examinations. They are computer based. Midterm instructions will be discussed prior to the exam. Failure to adhere to the instructions may result in loss of points.

**Assignments:** There will be **four** in-class assignments to be completed in the lab. These assignments will count towards 20% of your grade (5% each). The assignments will be done using excel and must be finished in the lab and uploaded onto Moodle. There will be no assignment handed in after class is over.

Each assignment will cover the previous chapters, and their accompanying excel exercises. You may use your notes. You can ask questions while solving the assignments. Students can speak to each other about the assignment; however, each student must hand in their own excel sheet.

**Class Preparation – Readings:** Each lecture will have a chapter reading that is encouraged before the lecture itself. In this way, you will see the material twice and it will help deepen your grasp of the topics.

**Attendance:** Every student in this course must abide by the Kuwait University Policy on Attendance (published in the Student Guide, Chapter 3, Section 13). A copy of the student guide can be accessed online on: <http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf>

This course has a significant seminar component and class participation is critical to the learning experience. Participation will be assessed in each class period. Your class participation and attendance will both contribute to your score of in-class performance.

You may miss 2 classes without impacting your attendance and participation grade. Every class missed after that will negatively impact your grade. I do not distinguish between excused and unexcused absences. If you miss 5 or more classes, you will receive a zero for your attendance and participation grade. I will take attendance 10 minutes after class starts. If you arrive late to class, you will be marked absent.

**Cheating and Plagiarism:** Every student in this course must abide by the Kuwait University Policy on Cheating and Plagiarism (published in the Student Guide, Chapter 3, Section 2). A copy of the guide is online on: <http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf>

Please carefully note all sources and assistance when you turn in your work. Under no circumstances should you take credit for work that is not yours. You should neither receive nor give any unauthorized assistance on any deliverable. If you have any questions about what constitutes “unauthorized assistance” please email me before the deliverable is submitted.

**Writing Style:** Students must refer to APA writing style for their assignments and report writing. Refer to the English Language Center for help.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grading:** The scores in this course will be the weighted average of the following items:   |  |  | | --- | --- | | **Weight** | **Description** | | 10% | Attendance and Participation | | 20% | Assignments (x4) | | 30% | Midterms (x2) | | 40% | Final Exam | | 100% | TOTAL | | **Grade Distribution:**   |  |  | | --- | --- | | **Grade** | **Range** | | A | ≥ 95 | | A- | ≥ 90 and < 95 | | B+ | ≥ 87 and < 90 | | B | ≥ 83 and < 87 | | B- | ≥ 80 and < 83 | | C+ | ≥ 77 and < 80 | | C | ≥ 73 and < 77 | | C- | ≥ 70 and < 73 | | D+ | ≥ 65 and < 70 | | D | ≥ 60 and < 65 | | F | < 60 | |

**Course Outline:**

|  |  |
| --- | --- |
| **Title** | **Topics** |
| Excel Functions | Using Array functions and formulas • Some Excel hints • User defined-functions with VBA • Macros and user interaction • Object and Ad-Ins |
| Basic Financial Calculations | Present value and NPV • IRR • Payment schedules • Discounting using dates cashflows |
| WACC | Calculating stock and market returns • Calculating standard deviations and correlations • Estimating beta using regressions • Unlevering and levering beta |
| Capital Budgeting | Decision Rules of capital budgeting • Using excel to estimate project cash flows • Using decision rules in excel to evaluate projects • Sensitivity analysis |
| Financial Statement Modeling | How financial models work? • Free cash flows: measuring the cash produced by the business • Using FCF to value the Firm and its equity • Sensitivity analysis • Incorporating a target D/E ratio in a Pro Forma |
| Portfolio Models | Calculating portfolio means and variances • Efficient portfolios • Calculating the efficient frontier • Finding efficient portfolios • Finding the market portfolio using CML • Testing the SML |
| Calculating the Variance-Covariance Matrix | Computing the sample variance-covariance matrix • Computing the Global minimum variance portfolio • Computing an efficient portfolio • The Single-Index model |
| The Construction of Efficient Portfolios | Estimating Beta • Testing the CAPM • VBA program to create the efficient frontier • The Black-Litterman approach to portfolio optimization |

**Course Schedule (tentative and subject to change)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Month** | **Lecture** | **Chapters** | **Slides/Lab #** |
| 3 | Feb | Syllabus and Basic Financial Calculations | 1 | 1 |
| 5 | Feb | Basic Financial Calculations | 1 | 1 |
| 10 | Feb | Basic Financial Calculations | 1 | 1 |
| 12 | Feb | Basic Financial Calculations | 1 | 1 |
| 17 | Feb | **In-class Assignment #1** | | |
| 19 | Feb | WACC | 2 | 3 |
| 24 | Feb | WACC | 2 | 3 |
| 26 | Feb |  |  |  |
| 3 | Mar | **In-class Assignment #2** | | |
| 5 | Mar | Capital Budgeting | 3 | 4 |
| 10 | Mar | Capital Budgeting | 3 | 4 |
| 12 | Mar | Capital Budgeting | 3 | 4 |
| 17 | Mar | Capital Budgeting | 3 | 4 |
| 19 | Mar | **MIDTERM** | | |
| 24 | Mar | Pro-Forma and Financial Statement Analysis | 4 | 3 |
| 26 | Mar | Pro-Forma and Financial Statement Analysis | 4 | 3 |
| 31 | Mar |  |  |  |
| 2 | Apr | Pro-Forma and Financial Statement Analysis | 4 | 3 |
| 7 | Apr | Pro-Forma and Financial Statement Analysis | 4 | 3 |
| 9 | Apr | **In-class Assignment #3** | | |
| 14 | Apr | DCF Valuation Models | 5 | 5 |
| 16 | Apr | DCF Valuation Models | 5 | 5 |
| 21 | Apr | DCF Valuation Models | 5 | 5 |
| 23 | Apr | **MIDTERM** | | |
| 28 | Apr | Bond Valuation | 6 | 6 |
| 30 | Apr | Portfolio Models | 7 | 7 |
| 5 | May | Portfolio Models | 7 | 7 |
| 7 | May | **In-class Assignment #4** | | |
| 12 | May | *Final Exam Review* | | |
| 14 | May | *Final Exam Review* | | |
| 21 | May | **FINAL EXAM from 2:00 PM to 4:00 PM** | | |

# CBA Competency Goals

1. **Analytical Competency:** A CBA graduate will be able to use analytical skills to solve business problems and make a well-supported business decision.

**Student Learning Objectives:**

* 1. Use appropriate analytical techniques to solve a given business problem.
  2. Critically evaluate multiple solutions to a business problem.
  3. Make well-supported business decisions.

1. **Communication Competency:** A CBA graduate will be able to communicate effectively in a wide variety of business settings.

**Student Learning Objectives:**

* 1. Deliver clear, concise, and audience-centered presentations.
  2. Write clear, concise, and audience-centered business documents.

1. **Information Technology Competency:** A CBA graduate will be able to utilize Information Technology for the completion of business tasks.

**Student Learning Objectives:**

* 1. Use data-processing tools to analyze or solve business problems.

1. **Ethical Competency:** A CBA graduate will be able to recognize ethical issues present in business environment, analyze the tradeoffs between different ethical perspectives, and make a well-supported ethical decision.

**Student Learning Objectives:**

* 1. Identify the ethical dimensions of a business decision.
  2. Recognize and analyze the tradeoffs created by application of competing ethical perspectives.
  3. Formulate and defend a well-supported recommendation for the resolution of an ethical issue.

1. **General Business Knowledge:** A CBA graduate will be able to demonstrate a basic understanding of the main business disciplines’ concepts and theories.

**Student Learning Objectives:**

* 1. Acquire a fundamental understanding of knowledge from the main business disciplines (e.g. finance, accounting, marketing, and management information systems, among others).

1. CBA Competency Goals can be found at the end of this document [↑](#footnote-ref-1)