**Course Syllabus**

**Fall 2021/2022**

**Dr. Khaled Alsabah**

**FIN 425 - Capital Budgeting & Long-Term Financing Decisions**

**Lecture Time and Location**

**FIN 425/51**  : Sun/Tue/Thu TIME 8:00 – 8:50 AM Classroom #  S| 01 C1 1020

**FIN 425/52**  : Sun/Tue/Thu TIME 9:00 – 9:50 AM Classroom #  S| 01 C1 1020

**Contact Information**

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

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**Office** : 4th Floor B - 1008

**Office Hours** : Sun/Tue/Thu 10:00 AM – 10:50 AM or by appointment. Feel free to email me anytime.

**Teaching Assistant**

**Name** : Reem Alhajeri

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

**Email** : [reem.alhajeri@ku.edu.kw](mailto:reem.alhajeri@ku.edu.kw)

**Office Hours** :

**Tutorial** : Sunday 4:00pm & Tuesday 10am

**Course Description**

This course focuses on capital budgeting and long-term financing decisions. All major topics concerned with strategic investment decisions are covered in the course, including investment value measurements, cash flow analyses, risk assessments, and capital structure/financing analyses. The problems will provide the opportunity to apply concepts and methods.

**Course Learning Objectives (CLOs)**

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

1. Explain the different types of valuation models and the assumptions behind them.
2. Use time value of money concepts to value the price of common equity and bonds.
3. Use capital budgeting methods (i.e. NPV, IRR, MIRR, PBP, etc.) to solve financial problems.
4. Estimate the future free cash flows for the project/company and use capital budgeting methods to arrive with the appropriate financial decision.
5. Use the relevant data to calculate the weighted average cost of capital for the company/project.
6. Estimate the expected net present value and standard deviation for the project and make the appropriate financial decision.

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

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

**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.

**Required Material**

**Textbook** : Berk, J., and DeMarzo, P. (2017). Corporate finance (4th ed.). Boston: Prentice Hall. (referenced) [Purchase Online Kindle Edition via Amazon or any other supplier]

**Additional Material**:

Seitz, N., & Ellison, M. (2005). Capital budgeting and long-term financing decisions (4th ed.). Mason, OH: Thomson/South-Western.

Supplemental Handouts on various topics will be provided during applicable sessions.

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

**Course Requirements and Policies**

**Individual Assignments:** There will be **five** assignments or problem sets to solve. All work must be done individually.

**In-Class Tests:**

*Quizzes*

There will be **five** in-class quizzes. Use the assignments as a chance to practice for each quiz, along with the practice problems for each chapter.

*Midterm*

There will be **one** in-class examination. Going over practice problems and assignments will help in preparation for the midterm.

**Class Preparation – Readings and Practice Problems:** 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. Additionally, I will post practice problems for each chapter, along with their final answers in each set of lecture slides on Moodle. You are encouraged to solve these problems before the TA go over them in the tutorial.

**Attendance and Participation:** 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.

**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 student guide can be accessed 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.

**Grading:**

The scores in this course will be the weighted average of the following items:

|  |  |
| --- | --- |
| **Weight** | **Description** |
| 10% | Attendance and Participation |
| 5% | Assignments (x5) |
| 20% | Quizzes (x5) **Drop Lowest One** |
| 25% | Midterm (x1) |
| 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** |
| **Chapter 4**  The Time Value of Money | Single Amount Problems • Annuity Problems • Complex Cash Flow Problems • Compounding More Than Once Per Period •  Alternate Payment Patterns • Present Value of a No-Growth Perpetuity • Present Value of a Constant-Growth Perpetuity |
| **Chapter 3, Chapter 6, Chapter 9**  Valuing the Security with Law of One Price | Arbitrage Valuation • Value and Price • Value of Bonds • Value of Stock • |
| **Chapter 8**  Fundamentals of Capital Budgeting | Relevant Cash Flows • Estimating Cash Flows from a Project• Sunk Costs • Opportunity Cost •Project Externalities •Net Working Capital |
| **Chapter 7**  Investment Decision Rules | NPV • IRR • Payback Rule • Mutually Exclusive Projects • Reasons for Mutually Exclusive Investments • Incremental IRR • Project Selection with Resource Constraints • Profitability Index |
| **Chapter 22**  Investment with Different Lives | Equivalent Annual Benefit • Using NPV with Unequal Lives |
| **Chapter 8**  Analyzing the Project | Sensitivity Analysis • Break-Even Analysis • Scenario Analysis |
| **Chapter 5**  Inflation and Capital Investment Analysis | Inflation Defined • Current and Constant Dollar Prices • Real and Nominal Interest Rates • Inflation and Interest rate • Inflation and Cash Flow • Recognizing Inflation in Capital Budgeting • Inflation and Cash Flow Projection |
| **Chapter 10**  Risk and Return | Calculate Historical Returns • Link between Risk and Return • Calculate Risk Using Probability • Calculate Risk Using Historical Returns • Covariance • Correlation • Standard Deviation |
| **Chapter 10 and 11**  Portfolio Theory | Systematic Risk • Portfolio Return• Portfolio Volatility • Mean-Variance Portfolio Principles • Special Problems in Applying the Mean-Variance Model to Capital Budgeting • Does Diversification Pay? • Risk Perspective |
| **Chapter 10**  CAPM | Asset Pricing Model (CAPM) • Beta |
| **Chapter 12**  Cost of Capital | Application of the CAPM to Capital Budgeting • Risk-Adjusted Required Return for a Project or Division of a Company • Using Comparable • •Cost of Capital Concept • Cost of Capital Components • Weights for the Weighted Average Cost |
| **Chapter 18**  Capital Budgeting and Valuation with Leverage | WACC • Project Based Costs of Capital |
| **Chapter 15**  Capital Structure |  |
| **Chapter 25**  Leasing |  |

**Course Schedule (tentative and might change without any notice)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Day | Month | Lecture | Book Chapter | DUE | Practice Problems # |
| Sun | 24/10/2021 | Introduction/ The Time Value of Money | 3.2, 4.1 |  |  |
| Tue | 26/10/2021 | The Time Value of Money | 4.1, 4.2 |  | 1 |
| Thu | 28/10/2021 | The Time Value of Money | 4.3, 4.4 |  | 1 |
| Sun | 31/10/2021 | The Time Value of Money | 4.5 |  | 1 |
| Tue | 2/11/2021 | The Time Value of Money | 4.7 | Give out HW 1 | 1 |
| Thu | 4/11/2021 | The Time Value of Money | 4.8 |  | 1 |
| Sun | 7/11/2021 | Valuing the Security with Law of One Price | 3.1,3.4,3.5 | HW1/ Quiz 1 | 2 |
| Tue | 9/11/2021 | Valuing the Security with Law of One Price | 5.3, 6.1,6.2 |  | 2 |
| Thu | 11/11/2021 | Valuing the Security with Law of One Price | 6.3, 6.4 |  | 2 |
| Sun | 14/11/2021 | Valuing the Security with Law of One Price | 9.1 |  | 2 |
| Tue | 16/11/2021 | Valuing the Security with Law of One Price | 9.2 |  | 2 |
| Thu | 18/11/2021 | Fundamentals of Capital Budgeting | 8.1 | Quiz 2 | 3 |
| Sun | 21/11/2021 | Fundamentals of Capital Budgeting | 8.2 |  | 3 |
| Tue | 23/11/2021 | Fundamentals of Capital Budgeting | 8.4 | Give out HW2 | 3 |
| Thu | 25/11/2021 | Investment Decision Rules | 3.3,7.1 |  | 4 |
| Sun | 28/1/2021 | Investment Decision Rules | 7.2 | HW2 | 4 |
| Tue | 30/11/2021 | Investment Decision Rules | 7.3 |  | 4 |
| Thu | 2/12/2021 | **Midterm (The Time Value of Money, Valuing the Security with Law of One Price, Fundamentals of Capital Budgeting)** |  |  |  |
| Sun | 5/12/2021 | Investment Decision Rules | 7.4, 7.5, 22.5 |  | 4 |
| Tue | 7/12/2021 | Investment Decision Rules | 7.4, 7.5, 22.5 | Give out HW3 | 4 |
| Thu | 9/12/2021 | Single Investment Risk Analysis | 8.5 |  | 4 |
| Sun | 12/12/2021 | Inflation and Capital Budgeting | 5.3 | HW3 | 5 |
| Tue | 14/12/2021 | Risk and Return | 10.1, 10.2, |  | 6 |
| Thu | 16/12/2021 | Risk and Return | 10.3, 10.4 | Quiz 3 | 6 |
| Sun | 19/12/2021 | Portfolio Theory | 10.5, 10.6 |  | 6 |
| Tue | 21/12/2021 | Portfolio Theory | 11.1, 11.2 |  | 6 |
| Thu | 23/12/2021 | CAPM | 10.7, 10.8 |  | 6 |
| Sun | 26/12/2021 | CAPM | 11.6 | Give out HW4 | 6 |
| Tue | 28/12/2021 | Cost of Capital | 12.5,12.6,12.7 |  | 6 |
| Thu | 30/12/2021 | Cost of Capital | 12.1, 12.2 | HW4 | 6 |
| Sun | 2/1/2022 | Cost of Capital | 15.1, 15.2 |  | 6 |
| Tue | 4/1/2022 | Capital Budgeting and Valuation with Leverage | 18.1, 18.2 |  | 7 |
| Thu | 6/1/2022 | Capital Budgeting and Valuation with Leverage | 18.5 | Quiz 4 | 7 |
| Sun | 9/1/2022 | Capital Structure | Ch 15 |  | 7 |
| Tue | 11/1/2022 | Capital Structure | Ch 15 | Quiz 5 | 7 |
| Thu | 13/1/2022 | Leasing | Ch 25 |  | 8 |
| Sun | 16/1/2022 | Leasing | Ch 25 |  | 8 |
| Tue | 18/1/2022 | Leasing | Ch 25 |  | 8 |
| Thu | 20/1/2022 |  |  |  |  |
| Sun | 30/1/2022 | **Final Exam (8am-10am)** |  |  |  |

**Appendix**

**Undergraduate Program 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)