

**Title (Units):** COMP7400 Financial Analysis and Decision Making (3,2,1)

**Course Aims:** Students will learn the methodologies and concepts of financial analysis and decision making.

**Prerequisite:** Postgraduate Student Standing

**Course Intended Learning Outcomes (CILOs):**

Upon successful completion of this course, students should be able to:

| No. | Course Intended Learning Outcomes (CILOs)   |
|-----|---|
|     | <b>Knowledge</b>  |
| 1   | Describe the basic concepts in operational finance  |
| 2   | Explain the key ratios and equations for financial analysis   |
| 3   | Explain the key elements of financial decision making   |
|     | <b>Professional Skill</b>   |
| 4   | Apply suitable models and methods to decision making situations                                       |
| 5   | Solve financial decision problems through the use of quantitative and qualitative analysis techniques |
|     | <b>Attitude</b>   |
| 6   | Formulate decision problems by viewing financial situations quantitatively and qualitatively          |

**Calendar Description:** This course aims to introduce basic concepts in operational finance, such as financial statements concepts, financial ratio analysis, and etc., and to describe the techniques and tools that support financial decision making. Students will learn how to apply the decision analysis and making techniques and tools to various phases of financial processes.

**Teaching and Learning Activities (TLAs):**

| CILOs | Type of TLA                         |
|-------|-------------------------------------|
| 1-3   | Lectures and problem classes        |
| 4-5   | Lectures, exercises and assignments |
| 5     | Problem and laboratory classes      |
| 6     | Lectures and problem classes        |

**Assessment:**

| No. | Assessment Methods    | Weighting | CILOs to be addressed | Description of Assessment Tasks   |
|-----|-----------------------|-----------|-----------------------|---|
| 1   | Continuous Assessment | 40%       | 1-6                   | This may include a mid-semester test and assignments. The test will be used to determine the students' understanding of the concepts and techniques of financial analysis and decision making. Assignments are designed to assess the students' mastery of the techniques and their applications. |
| 2   | Examination           | 60%       | 1-5                   | The final examination is designed to measure the extent to which the students have reached all of the learning outcomes. Students are required to have a good mastery of the concepts, methodologies, and applications of decision making to financial situations and problems.                   |

**Assessment Rubrics:**

|                      |  |
|----------------------|--|
| <b>Excellent (A)</b> | <ul style="list-style-type: none"><li>Achieves all the first five CILOs, with strong evidence of having achieved the last CILO, demonstrating a good mastery of both the theoretical and practical</li></ul> |
|----------------------|--|

|                         |  |
|-------------------------|--|
|                         | <p>aspects of the knowledge and skills associated with financial analysis and decision making</p> <ul style="list-style-type: none"> <li>• Able to develop and present sound arguments and correct solutions to problems, accompanied by in-depth analysis and insight</li> <li>• Demonstrates a thorough understanding and solid knowledge of financial analysis and decision making concepts, algorithms, and methodologies</li> <li>• Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new financial decision making situations and problems</li> </ul> |
| <b>Good (B)</b>         | <ul style="list-style-type: none"> <li>• Achieves all the first five CILOs, and evidence of having achieved the last CILO, demonstrating a good understanding of the associated concepts and underlying methodologies</li> <li>• Able to develop solutions to problems, accompanied by adequate explanations</li> <li>• Demonstrates a competent level of knowledge of financial analysis and decision making concepts, algorithms, and methodologies</li> <li>• Ability to make use of appropriate techniques and knowledge and apply them to familiar situations and problems</li> </ul>               |
| <b>Satisfactory (C)</b> | <ul style="list-style-type: none"> <li>• Achieves most of the first five CILOs, demonstrating a basic level of understanding of the associated concepts and underlying methodologies</li> <li>• Able to provide acceptable solutions to problems</li> <li>• Demonstrates an adequate level of knowledge of financial analysis and decision making</li> <li>• Ability to make use of some techniques and knowledge and apply them to familiar situations</li> </ul>   |
| <b>Fail (F)</b>         | <ul style="list-style-type: none"> <li>• Achieves less than three of the CILOs, with little understanding of the associated concepts and underlying methodologies</li> <li>• Unable to provide solutions to simple problems</li> <li>• Knowledge of financial analysis and decision making falling below the basic minimum level</li> <li>• Unable to apply techniques or knowledge to situations or problems</li> </ul>   |

**Course Content and CILOs Mapping:**

| Content |                              | CILO No. |
|---------|------------------------------|----------|
| I       | Financial Analysis Framework | 1-2,4-6  |
| II      | Financial Decision Making    | 3-6      |

**References:**

- Weaver, S. C. (2012). The Essentials of Financial Analysis, McGrawHill.
- Stephen, H. P. (2013). Financial Statement Analysis and Security Valuation, Fifth Edition, McGraw-Hill.
- Steven M. Bragg. (2014). Financial Analysis: Second Edition: A Business Decision Guide, Accounting Tools, 2nd Edition.
- Vance, D. E. (2003). Financial Analysis & Decision making, McGrawHill.
- Albright, S. C., Winston, W. L., and Zappe, C. J. (2011). Data Analysis and Decision Making, 4th Edition. Cengage Learning.
- Kovalerchuk, B., (2013). Data Mining in Finance: Advances in Relational and Hybrid Methods, Springer-Verlag New York Inc.
- Sengupta, C. (2010). Financial Analysis and Modeling using Excel and VBA. 2nd Edition, Wiley.
- Benninga, S. (2014). Financial Modeling. (MIT Press), The MIT Press.

**Course Content:**

**Topic**

- I. Financial Analysis Framework
  - A. Financial statements concepts
  - B. Financial ratio analysis

- C. Financial planning and control
  - D. Capital analysis and corporate investment
  - E. Long-term financing strategies
  - F. Finance and corporate strategy
  - G. Valuation of firms
- II. Financial Decision Making
- A. Introduction to decision making tools and techniques
  - B. Data mining for financial decision making (e.g. classification, and genetic algorithms)
  - C. Data analytical tools for finance (e.g. regression analysis, and sensitivity analysis)
  - D. Decision tables and decision trees
  - E. Multi-criteria decision analysis
  - F. Analytic hierarchy process