

# **FACULTY OF BUSINESS**

# MASTER OF SCIENCE IN FINANCE WITH DATA ANALYTICS LEARNING MODULE OUTLINE

| Academic Year         | 2024/2025                     | Semester      | 1                |  |  |  |
|-----------------------|-------------------------------|---------------|------------------|--|--|--|
| Module Code           | FIDA6101-111/112              |               |                  |  |  |  |
| Learning Module       | Financial Markets and Institu | itions        |                  |  |  |  |
| Pre-requisite(s)      | Nil                           |               |                  |  |  |  |
| Medium of Instruction | English                       |               |                  |  |  |  |
| Credits               | 3                             | Contact Hours | 45               |  |  |  |
| Instructor            | Lei Kuan Hou                  | Email         | t1778@mpu.edu.mo |  |  |  |
| Office                |                               | Office Phone  |                  |  |  |  |

#### MODULE DESCRIPTION

This module studies the functions, pricing, and institutional structures of financial markets. Topics include determinants of interest rates, interest rates and securities valuation, securities markets such as money markets, bond markets, foreign exchange markets, commercial banks, other financial institutions such as insurance companies, securities firms, investment companies, and risk management in financial institutions.

#### **MODULE INTENDED LEARNING OUTCOMES (ILOS)**

On completion of this learning module, students will be able to:

| M1. | Identify and evaluate the mechanics and regulation of interest rate, financial markets and institutions.   |
|-----|--|
| M2. | Identify types of risks incurred by financial institutions and evaluate their corresponding risk management  |
| M3. | Explore the international integration of international financial markets and analyze the implications for financial managers.  |
| M4. | Demonstrate good communication, numerical and analytical skills through project and assignment as well as classroom discussions for local and global current issues in financial markets and institutions. |
| M5. | Demonstrate good skills in time management, working with others and independent study.   |



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These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

| PILC | )s  | M1 | M2 | М3 | M4           | M5           |
|------|---|----|----|----|--------------|--------------|
| P1.  | Master critical knowledge of financial theories, financial models and data analytics in finance and apply it to a wide range of complex financial issues.     | ~  | ~  | ~  | ~            |              |
| P2.  | Expand knowledge of finance and data analytics through critically evaluating current issues informed by leading edge research and practice in the industry.   |    |    | ~  | $\checkmark$ |              |
| РЗ.  | Conduct applied research, particularly using data analytics,<br>into financial issues through a rigorous and systematic<br>approach.                          |    |    |    |              |              |
| P4.  | Communicate effectively, written and orally, to both professional and non-professional audiences on local and global financial issues.                        |    |    |    | ~            |              |
| P5.  | Demonstrate skills in time management, teamwork,<br>leadership and independent study so that tasks can be<br>planned and implemented at a professional level. |    |    |    |              | $\checkmark$ |
| P6.  | Identify and address ethical dilemmas and social responsibility issues to uphold high standards of integrity, professionalism and ethical behaviour.          |    |    |    |              |              |

# MODULE SCHEDULE, COVERAGE AND STUDY LOAD

| Week | Content Coverage   | Contact Hours |
|------|--|---------------|
| 1    | Determinants of Interest Rates                                       | 3             |
| 2    | The Federal Reserve System, Monetary Policy, and Interest Rates      | 3             |
| 3    | Money Markets and Bond Markets                                       | 3             |
| 4    | Foreign Exchange Markets   | 3             |
| 5    | Commercial Banks   | 3             |
| 6    | Commercial Banks' Financial Statements and Analysis                  | 3             |
| 7    | Regulation of Commercial Banks                                       | 3             |
| 8    | Insurance Companies  | 3             |
| 9    | Securities Firms, Investment Banks and Investment Companies          | 3             |
| 10   | Types of Risks Incurred by Financial Institutions                    | 3             |
| 11   | Managing Credit Risk on the Balance Sheet                            | 3             |
| 12   | Managing Liquidity Risk on the Balance Sheet                         | 3             |
| 13   | Managing Interest Rate Risk and Insolvency Risk on the Balance Sheet | 3             |
| 14   | Project Presentations  | 3             |



| 15 | Final examination   | 3  |
|----|---------------------|----|
|    | Total contact hours | 45 |

#### **TEACHING AND LEARNING ACTIVITIES**

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

| Teaching and Learning Activities   | M1           | M2           | М3           | M4           | M5           |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| T1. Interactive lectures           | $\checkmark$ | $\checkmark$ | $\checkmark$ |              |              |
| T2. In-class Exercises and quizzes | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| T3. Assignments                    | $\checkmark$ | ~            | ~            | $\checkmark$ | $\checkmark$ |
| T4. Team project                   |              |              |              | $\checkmark$ | $\checkmark$ |

#### ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Master's Degree Programmes of the Macao Polytechnic University. Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

#### ASSESSMENT

In this learning module, students are required to complete the following assessment activities:

| Assessment Activities                    | Weighting (%) | ILOs to be Assessed |
|--|---------------|---------------------|
| A1. Participation and in-class exercises | 30%           | M1/M2/M3/M4/M5      |
| A2. Individual assignments               | 20%           | M1/M2/M3/M4         |
| A3. Team project                         | 20%           | M4/M5               |
| A4. Final examination                    | 30%           | M1/M2/M3            |

The assessment will be conducted following the University's Assessment Strategy (see <u>www.mpu.edu.mo/teaching learning/en/assessment\_strategy.php</u>). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.

#### MARKING SCHEME(Assessment Rubrics)

| Assessment<br>Tasks | Criteria | Excellent<br>(A, A-) | Very Good,<br>Good<br>(B+, B, B-) | Satisfactory<br>(C+, C, C-) | Pass<br>(D+,<br>D) | Fail<br>(F) |
|---------------------|----------|----------------------|-----------------------------------|-----------------------------|--------------------|-------------|
|                     |          | 88-100               | 73 - 87                           | 58 - 72                     | 50 -<br>57         | 0-49        |



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| 1. | Class<br>Learning<br>Activities | Demonstrate the<br>understanding of<br>the subjects covered<br>in classes and show<br>active learning<br>attitude   | High | Significant | Moderate | Basic | Not even<br>reaching<br>marginal<br>levels |
|----|---------------------------------|---|------|-------------|----------|-------|--|
| 2. | Assignments                     | Demonstrate the<br><b>ability</b> to answer<br>questions on topics<br>covered in the<br>outline   | High | Significant | Moderate | Basic | Not even<br>reaching<br>marginal<br>levels |
| 3. | Team Project                    | Demonstrate the<br>understanding of<br>the subject and the<br>arguments are<br>articulated and<br>organized in terms<br>of verbal<br>presentation and<br>report writing | High | Significant | Moderate | Basic | Not even<br>reaching<br>marginal<br>levels |
| 4. | Final<br>examination            | Demonstrate the<br>ability to identify<br>and apply<br>appropriate<br>concepts, methods<br>and techniques<br>covered in classes   | High | Significant | Moderate | Basic | Not even<br>reaching<br>marginal<br>levels |

# **REQUIRED READINGS**

Anthony Saunders, Marcia Millon Cornett, Otgo Erhemjamts, 2022, ISE Financial Markets and Institutions, 8th Edition, McGraw Hill. (eBook + Connect)

#### REFERENCES

# Reference book(s)

- 1. Jeff Madura, 2020, AE Financial Markets and Institutions, 13th Edition, Cengage.
- 2. Frederic S. Mishkin / Stanley Eakins, 2018, Financial Markets and Institutions, Global Edition 9/E, Pearson.
- 3. Christopher Viney, Peter Phillips, 2019, Financial Institutions, Instruments and Markets, 9th Edition, McGraw Hill.

# Journal(s)

- 1. Journal of Finance
- 2. Review of Financial Studies
- 3. Journal of Financial Economics
- 4. Journal of Financial Intermediation

# Website(s)

https://www.stlouisfed.org/



#### STUDENT FEEDBACK

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

#### ACADEMIC INTEGRITY

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at <a href="https://www.mpu.edu.mo/student\_handbook/">www.mpu.edu.mo/student\_handbook/</a>.