SYLLABUS

FI402E_0108_26

Financial Markets and Portfolio Management

ACADEMIC AREA :	**FINANCE AND GEOPOLITICS**
PROGRAMME :	**PGE**
PERIOD :	**FALL**
COORDINATOR :	**Ms. Ousayna ZREIK**
INSTRUCTOR(S) :	**Mr. Alexis BISMUTH** **Mr. Samuel URVOY**
CONTACT HOURS :	**Ms. Ousayna ZREIK**
STUDY TIME :	**24.0 hours**
CREDITS :	**95 hours (Class preparation, homework and assessments)**
	4.0 ECTS
AOL :	**YES**

PRE-REQUISITE MODULES :

Corporate Finance Fundamentals (FI443E or equivalent) and/or Financial Analysis (FI403E or equivalent)

MODULE DESCRIPTION :

This advanced postgraduate module is designed to develop students' ability to design, evaluate, and manage investment portfolios in uncertain and dynamic financial markets.
Through the mobilization of financial theory (e.g., CAPM, diversification, behavioral finance) and applied tools (Excel simulations, performance metrics, derivatives strategies), students learn to make informed investment decisions under risk, justify portfolio choices, and adapt strategies to changing market conditions.
The module addresses real-world challenges such as market volatility, investor behavior biases, and sustainable investment considerations, enabling students to position portfolio management as a key competency in financial decision-making and business performance.

CONTRIBUTION TO PROGRAMME LEARNING OBJECTIVES :

- Change Business Models by leveraging the economic, ecological and social performance of the firm and its operations #ChangeBusiness
- Connect physical and digital spaces through advanced technological, AI and Data literacy to steer activites and processes #ConnectSpaces

MODULE INTENDED LEARNING OUTCOMES (ILOs) :

At the end of this module, students will be able to demonstrate the following professional competencies:

ILO 1 – Financial Market Analysis

Analyse financial markets and instruments to diagnose investment opportunities and risks using asset pricing frameworks and behavioral finance insights.

ILO 2 – Portfolio Construction & Optimization

Design and justify diversified investment portfolios using quantitative tools (risk-return metrics, CAPM, efficient frontier) to optimize performance under constraints.

ILO 3 – Investment Decision-Making

Evaluate and recommend investment strategies (including derivatives and ESG considerations) based on market conditions and investor objectives.

ILO 4 – Performance Evaluation & Communication

Assess and communicate portfolio performance using financial metrics (Sharpe, Jensen, Treynor) and data-driven tools (Excel simulations) to support professional decision-making.

TOPICS COVERED :

The course begins with an overview of financial markets, their functions, instruments, and participants, including the distinctions between primary and secondary markets, and between equities, debt instruments, and derivatives. It then introduces the investment process, covering asset allocation, security selection, and portfolio construction. A significant portion is dedicated to understanding risk and return, including measures such as standard deviation, beta, and correlation, as well as the use of scenario analysis. Students will explore the Capital Asset Pricing Model (CAPM) and its extensions, including the Security Market Line and the Fama-French models, to understand pricing and expected returns. The course also emphasizes performance evaluation through Sharpe, Treynor, and Jensen's alpha, and introduces downside risk and extreme risk measures such as Value at Risk (VaR) and Conditional VaR. Behavioral finance is examined as a contrast to efficient market theory, highlighting psychological biases and their effects on investor behavior. The final sessions introduce derivative instruments, particularly options, covering option valuation, payoff profiles, and basic trading strategies such as protective puts and covered calls.

RESEARCH-LED TEACHING :

This course integrates research-led teaching by drawing on both foundational academic theories and recent empirical studies in the fields of financial markets and portfolio management. Key concepts such as market efficiency, portfolio diversification, and asset pricing are presented through the lens of influential academic models, including those by Markowitz, Sharpe, Fama, and French. Behavioral finance components incorporate findings from contemporary research on investor psychology and market anomalies. Throughout the course, students engage with real-world datasets and case studies that reflect current trends and published research in journals such as The Journal of Finance, Review of Financial Studies, and Journal of Behavioral Finance. Class discussions and assignments are designed to develop students' ability to critically evaluate academic research and apply it to practical investment decisions, bridging the gap between theory and practice.

CSR AND SUSTAINABLE DEVELOPMENT GOALS :

This course encourages critical reflection on the social and environmental impacts of investment decisions, integrating Corporate Social Responsibility (CSR) and sustainable finance principles into financial analysis and portfolio construction. Students explore how ESG (Environmental, Social, and Governance) factors are increasingly incorporated into asset pricing models, risk assessments, and institutional investor strategies. Particular attention is given to sustainable investment vehicles, such as green bonds and ESG funds, and how they align with global sustainability objectives. The course contributes to the following UN Sustainable Development Goals: SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action), by promoting responsible investment behavior and long-term financial stewardship. Case studies and discussions provide students with the tools to assess the ethical and sustainability implications of financial market behavior.

CSR NB HOURS :

3

SUSTAINABLE DEVELOPMENT GOALS COVERED :

- 09 - Industry, innovation and infrastructure
- 12 - Responsible consumption and production
- 13 - Climate action

TEACHING METHODS :

The course adopts a practice-oriented teaching methodology that blends theoretical frameworks with applied financial tools. Core concepts are introduced through interactive lectures and reinforced through Excel exercises, financial case studies, and portfolio simulations.
Students participate in an experiential portfolio management exercise using the Investopedia stock simulator platform, where they construct, monitor, rebalance, and evaluate an investment portfolio under changing market conditions.
This simulation-based approach enables students to apply portfolio theory, performance evaluation metrics, behavioral finance concepts, and investment strategy analysis in a realistic decision-making environment.

METHODS OF ASSESSMENT :

Continuous/Final	Group/Individual	Assessment	Weight	Duration	ILOs assessed
Continuous	Individual	Quiz	20%	30 Minutes	1 ,2
Final	Individual	Final written exam	50%	2 Heures	1, 3, 4
Continuous	Group	Written assessment at home	30%		2, 3, 4

Assessment 1 details:

Handwritten test during session 5 cover sessions 1, 2, 3, 4

Assessment 2 details:

Cover entire course

Assessment 3 details:

Students work in groups to construct, monitor, and evaluate an investment portfolio using the Investopedia stock simulator platform. The project requires students to apply portfolio diversification principles, risk-return analysis, asset allocation strategies, and portfolio performance evaluation metrics.

Groups submit a professional investment report including portfolio rationale, investment decisions, performance analysis, and reflections on portfolio adjustments made in response to market developments and investor objectives. ESG and ethical investment considerations should be integrated where appropriate.

ACADEMIC INTEGRITY :

Academic integrity at Rennes SB is about sharing a set of values and practices promoting intellectual honesty, trust, fairness, respect and responsibility in all aspects of learning, studying and researching. Upholding academic integrity is key to maintaining the reputation of the student and the ultimate value of Rennes SB Degrees. Students are expected to demonstrate these values when submitting assessed work.

Academic misconduct is defined as gaining or attempting to gain an unfair academic advantage for yourself or for others during formal assessments. The following are examples of academic misconduct:

· Cheating
· Plagiarism
· Falsification
· Gaining an unfair advantage

· Assisting others in committing academic misconduct, such as by using generative AI
· Falsification of records or official documents
· Unauthorised access to restricted information or data
· Unauthorised or unethical use of generative AI

Academic misconduct is a serious offense and can result in consequences such as module failure, research project failure, or even exclusion from Rennes SB. To prevent unintentional academic misconduct, it is essential to read and comply with the Rennes SB Academic Integrity Policy for Assessments (available on RISE). Regarding use of AI in learning and assessment please consult your professor for specific instructions pertaining to this module.

BIBLIOGRAPHY :

-> Bodie, Z., Kane, A. and Marcus, A.J. (2023). Investments and portfolio management. (13h edn). McGraw-Hill. [eBook https://tinyurl.com/bdtbbrbp]

Additional Reading

-> Reilly, F.K. and Brown, K.C. (2012). Analysis of investments and management of portfolios. (10th edn). South-western Cengage Learning.

MODULE PLAN SESSIONS :

Plan Session 01 :

Introduction to Financial Markets and Investment Instruments

Plan Session 02 :

Behavioral Finance and Market Efficiency

Plan Session 03 :

Risk and Return: Measurement and Analysis

Plan Session 04 :

Portfolio Theory and Diversification Strategies

Plan Session 05 :

Capital Asset Pricing Model (CAPM) and Multi-Factor Models

Plan Session 06 :

Performance Evaluation: Risk-Adjusted Returns

Plan Session 07 :

Options and Derivatives: Concepts and Strategies

Plan Session 08 :

Investment Strategies, Ethics, and ESG Integration

Plan Session 09 :

.