

CBN COLLABORATIVE POSTGRADUATE PROGRAMME
DEPARTMENT OF ECONOMICS, UNIVERSITY OF NIGERIA NSUKKA
ASSET PRICING THEORY AND PRACTICE
MODULE SPECIFICATION

1. **Module Title:** Asset Pricing Theory and Practice
2. **Module Code:** ECO 515
3. **Number of credits:** 3
4. **Level:** MSc.
5. **Semester:** 1st
6. **Pre-requisites for admission to the module (if any)**
The pre-requisite is that the student has a satisfactory knowledge of economic theory and quantitative techniques.
7. **Module Coordinator**
Dr. Aliyu Rafindadi Sanusi
8. **Aims**
Upon completion of the course, students are expected to:
 1. develop a fundamental knowledge of asset pricing theory under perfect capital markets;
 2. gain exposure to research in asset pricing theory under imperfect capital markets;
 3. gain an understanding of the characteristics of derivatives instruments (futures and options contracts), the different motivations for their use and how they are traded;
 4. cultivate a critical perspective to issues pertaining to pricing and hedging with options on individual stocks and indexes, to examine forwards and futures contracts for equity indexes, commodities, and currencies.
 5. model the relationship between risk and return, optimal portfolio selection, asset pricing models, market efficiency, portfolio performance evaluation, and the theory of active portfolio management.
9. **Summary of Content**
The course exposes students to the theory and mechanics of Asset pricing. The theoretical aspects covers choice under uncertainty (Expected Utility, Risk Aversion and Stochastic Dominance); Two-Period Consumption/ Portfolio Problems; Law of one price, No Arbitrage, and Stochastic Discount Factor (SDF); Pareto Optimality, Aggregation, and Consumption-Based Pricing Models; Mean-Variance Efficiency and the Capital Asset Pricing Model (CAPM); Relation between Consumption-Based Pricing Models, Stochastic Discount Factors, Betas, and Mean-Variance Frontiers; Asset Pricing in Multi-Period Securities Markets;

Asymmetric Information in Financial Markets; strategic Trading with Information Asymmetry in Financial markets; Bid-Ask Trading with Information Asymmetry in Financial Markets; Competitive Trading Model with Information Asymmetry in Financial Markets; Market Frictions in Financial markets.

The practical aspect will involve the use of variety of econometric techniques, including GMM and maximum likelihood, as well as various time-series models to derive: 1. time-series properties of asset returns (predictability, volatility, correlations with other variables, etc.) 2. cross-sectional properties of asset return implied by equilibrium asset pricing models (including CAPM, consumption-based asset pricing, factor models, etc.).

10. Module Intended Learning Outcomes (MILOs)

Upon successful completion of this module, students will be able to:

No.	Milos	Weighting (%)
1	Analyze and evaluate financial markets, how securities are traded, mutual funds, investment companies, and investor behavior.	Refer to no.15
2	Construct optimal portfolios and illustrate the theory and empirical applications of asset-pricing models.	
3	Characterize the implications of the market efficiency evidence on active portfolio management.	
4	Illustrate the theory and empirical applications of asset-pricing models: the CAPM, APT and multifactor asset pricing models.	
5	Critically evaluate the empirical evidence on securities returns, active management and the related implications for market efficiency.	
6	Apply the concept of risk, its measurement for single assets and portfolios, various types of risk, the source and use of betas, and the CAPM and SML.	

11. Teaching and Learning Activities (TLAs)

MILO No.	TLAs	Functions	Hours/Week
1,2,3,4,5,6,	Lectures and materials	Course instructors will introduce, with appropriate audio-visual materials, the critical concepts and theories through lectures.	3 hours
1,2,3,4,5,6	Tutorials (Group Discussions, Lab Sessions, Quizzes, Presentations, Peer Review)	Tutorial sessions will introduce additional learning support with activities such as case studies, group discussion, presentations, peer review,	

		quizzes. Emphasis is placed on in-depth learning of the theories, their relevance and applications to Developing economies.	1 hour
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12. Assessments Tasks/Activities

MILO No.	Type of assessment tasks/activities	Weighting (if applicable)	Remarks
1,2,3,4,5,6	Examination Students are required to participate in a three-hour examination to test their acquisitions of concepts, theories and knowledge.	60%	
1,2,3,4,5,6	Written Test/Quizzes 1-hour written test/Pop Quizzes	20%	Week 7/On Going basis
1,2,3,4,5,6	Coursework Paper Students will hand in a coursework research paper on any of the five topics as their individual assignment.	20%	Students must hand in their coursework paper in Week10

13. Attendance Requirements

Students are required to attend all tutorials and lectures and laboratory sessions (if any). Students must have at least 75% attendance to qualify for the examination.

14. Contribution to Programme Learning Outcomes

No	PIOs	MILO No
1	develop in the students a thorough knowledge and applied competence in the fundamentals of Economics.	1, 2, 3, 4, 5, 6
2	develop in the students an ability to critically appraise alternative systems of Economics.	3, 4, 5
3	equip students with economic theories that will lead to expertise in Economics	1, 2, 3, 4, 5, 6
4	provide training to qualified graduates of economics and to other individuals whose prior training or experience has made them capable of playing a leadership role in the economics profession	1, 2, 3, 4, 5, 6
5	equip students with the ability to analyse and undertake courses of action to improve organisational performance using financial, operational and strategic perspectives and frameworks learned in the coursework and	1, 4, 5, 6

	experience	
6	prepare students for managerial positions in the industries, as well as other related organisations	5, 6
7	prepare participants for positions as consultants, advocates, analysts, or directly as policy makers in the public and private sector	1, 2, 3, 4, 5, 6
8	Inculcate the requisite intellectual/conceptual foundations that will permit meaningful participation in the discussion or resolution of the problems which confront the Economics discipline in the contemporary world	1, 2, 3, 4, 5, 6
9	encourage research into problems which impede the maximum contribution of Economics to national development and well-being of the people	4, 5, 6
10	develop skill in logical reasoning and critical analysis and improve the capacity students in formulating sound economic policies and strategies	2, 3, 4, 5, 6

15. Grading of Student Achievement

Letter Grade	% Mark	Grade Definitions	Remarks
A	70 and above	Excellent	Demonstrates excellent understanding of the subject matters.
B	60-69	Good	Demonstrates a good understanding of the subject matters, though missing some of the points.
C	50-59	Adequate	Demonstrates an adequate understanding of the core of the subject matters and can only recall limited content
F	<50%	Fail	Demonstrates a wrong understanding of the subject matter.

15. Resources

Suggested primary texts

SN	Name of Author(s)	Year of Publication	Title of Book	Edition	Publisher's Name	ISBN
1	Back, K.	2017	Asset Pricing and Portfolio Choice Theory	2 nd Edition	Oxford University Press	9780190241148
2	Copeland, T. E., J. F. Weston, & K. Shastri	2005	Financial Theory and Corporate Policy	4 th Edition	Pearson Addison Wesley.	9780321127211

3	Pennacchi, G.,	2008	Theory of Asset Pricing	1 st Edition	Pearson Addison Wesley	9780321127204
4	Bodie, Z., Kane, A. & A. Marcus	2013	Investments	10 th Edition	McGraw-Hill/Irwin	9780077861674
5	Brunnermeier, Markus, K.	2014	Lecture Notes on Asset pricing models	na	na	na
6	Cochrane, J.	2018	Asset Pricing	2 nd Edition	Princeton University Press	9781400829132
7	Cvitanic, Jaksza & Fernando Zapatero	2004	Introduction to the Economics and Mathematics of Financial Markets	Revised Edition	MIT Press	9780262304108

Suggested secondary texts

SN	Name of Author(s)	Year of Publication	Title of Book	Edition	Publisher's Name	ISBN
1	Benninga, S.	2014	Financial Modeling	3 rd Edition	MIT Press	9780262027281
2	Berk J. & DeMarzo, P.	2011	Corporate Finance	4 th Edition	Prentice Hall	9780134083278
3	Brealey, R., Myers, S. & Allen, F.	2019	Principles of Corporate Finance	13 th Edition	McGraw-Hill	9781260565553
4	Duffie, D.	2001	Dynamic Asset Pricing Theory	3 rd Edition	Princeton University Press	9780691090221
5	Fabozzi, F.J., Modigliani, F.P., & Jones, J.F.	2010	Foundations of Financial Markets and Institutions	4 th Edition	Prentice Hall	9780133289800
6	Howells, P., & Bain, K.	2007	Financial Markets and Institutions.	Edition	Prentice Hall/ Financial Times	9780273709190
7	Hull, J. C.	2017	Options, Futures, and Other Derivatives	10 th Edition	Pearson	978-0134472089
8	Hull, J. C.	2018	Risk Management and Financial Institutions	5 th Edition	Wiley Finance	978-1-119-44811
9	Ingersoll, J. E.,	1986	Theory of Financial Decision Making.	1 st Edition	Rowman & Littlefield	9780847673599
10	Piet, Sercu	2009	International Finance:	Edition	Princeton	9780691136677

			Theory into practice		University Press	
11	Ross, S., Westerfield, R. & Jaffe, J.	2019	Corporate Finance	12 th Edition	McGraw- Hill	9781259918940

Suggested Journals

The Review of *Asset Pricing* Studies
 Review of Asset Pricing Studies
Journal of Risk and Financial Management
 Journal of Financial Markets
 International Journal of Financial Markets and Derivatives
 Journal of Capital Markets Studies
 Journal of International Financial Markets, Institutions & Money
 Financial Markets Institutions and Instruments
 Economics and Finance Journals
 CBN Journal of Economics and Financial Review
 CBN Bullion
 Finance Journal
 Nigerian Journal of Economic and Social Studies
 African Review of Money, Finance and Banking
 International Research Journal of Finance and Economics
Journal of Emerging Market Finance
 Quarterly Journal of Finance

Note: Required readings of journal papers (on an occasional basis) will be announced in class

Facilities Requirements

A lecture room with appropriate teaching and laboratory (if any) facilities.