Course Syllabus

National Institute of Development Administration(NIDA)
School of Development Economics

Section 1: General Information

1.	**Course Code**	DE 9300
	Course Title	Financial Economics
2.	**Number of Credit**	3 credits
3.	**Program and course**	Doctor of Philosophy Program in Economics Course Categories ❑ Intensive Course ❑ Basic Course ❑ Core Course ☑ Field Course ❑ Elective Course ❑ Independent Study
4.	**Lecturer**	Asst.Prof.Dr. Wisit Chaisrisawatsuk/ Assoc.Prof.Dr. Sorasart Sukcharoensin
5.	**Semester/Academic Year**	1/2015
6.	**Prerequisite(if any)**	-
7.	**Co-requisites(if any)**	-
8.	**Location**	National Institute of Development Administration Room No. 8009, Navamindradhiraj Building, 8th Fl.
9.	**Date of course initiation or last update of course details**	6 July 2015

Section 2: Purposes and Objectives

1. Course Goal

The course offers fundamental concepts and techniques of economics involving financial theory, and able to use it for analysis the financial problem.

2. Course Objectives

The objective of this course is to give students principle understanding of the main theoretical models used by financial economists. In this course students will see how the main results of finance theory emerge from suitably specialized versions of general economic models. This course first is concerned about the financial model with symmetric information in competitive market such as mean-variance and CAPM. Then the model with asymmetric information is introduced. The topics in this section are about contact of financial institution such as insurance and bank.

Section 3: Description and Implementation

1. Course Description

A synthesis of finance theory from the perspective of continuous-time analysis. It examines the microeconomic foundations of individual financial behavior, the financial market, and financial intermediation with some emphasis on risk and uncertainty. Topics include portfolio selection theory and investment decision, market signaling, market imperfection, capital pricing models, option pricing, arbitrage pricing, securitization, derivatives, hedge funds and agency theory.

2.Semester Hours

Lecture	Practice	Self-study	Field trip/Internship	Extra Classes
45 hour (3 hour x 15 weeks)	-			45 hour

3. Office Hours

Monday 02:00 – 05:00 PM and Tuesday 01:00 – 04.00 PM; and by appointment.

Section 4: Learning Outcomes Development

Curriculum Mapping

Expected learning outcomes

1. Morals and Ethics

1.1 Morals and Ethics to be developed

- (1) Awareness of values and virtues of ethics, sacrifice and honesty;
- (2) Being disciplined, punctual and responsible regarding themselves, their profession and society;
- (3) Having the leadership and interpersonal skill in teamwork, and also the ability to resolve conflicts and know how to priorities.
- (4) Respect and listen to people's opinions and also respect the value the dignity of fellow human beings.
- (5) Respect rules and regulations of their respective organizations and society;
- (6) Ability to analyze economic impact on individual and society;
- (7) Maintaining their respective professional ethics.

●Major Responsibility ○ Minor Responsibility

1.2 Teaching methods

Setting corporate culture to instill the students with discipline, for instance, emphasizing on class attendance on time, Students must learn to work with in groups, be trained to become a group leader and/or a group's member. They are to be honest, such as not committing fraud in examination or copying someone else's homework, etc. In addition, every instructor may add moral and ethical issues in course syllabuses.

1.3 Evaluation

Assessment can be performed on timeliness of the students in class attendance, submitting the assignment within the given date, involvement in activities, amount of fraudulent acts in the examinations, and responsibilities to duties as assigned.

2. Knowledge

2.1 Expected Knowledge

- (1) Have knowledge and understanding of the principles and theories of the field
- (2) Have knowledge of macroeconomic and able to use economics as tool in applying to solve economic problems and additional self – study
- (3) Able to keep on tract of academic progress and synthesis of advanced economics
- (4) Able to analyze and research on economic issues and able to present research paper

●Major Responsibility ○ Minor Responsibility

2.2 Teaching methods

Use teaching methods in various ways by focusing on theoretical and practical applications that are up – to changes in economics, and according to the nature of the course.

2.3 Evaluation

1) Subtests
2) Mid – term and Final examinations
3) Evaluation of the student's report

Curriculum Mapping

Expected learning outcomes

4) Qualification examination
5) Dissertation proposal examination
6) Dissertation final examination

3. Intellectual Skills

3.1 Learning Results on Intellectual Skills

Students need to develop intellectual skills along with ethics and knowledge of the economics. While teaching, the lecturer has to focus on students' ability to reason causes of problems and to solve the problems. The students must have following qualifications in order to achieve the intellectual skills:

- (1) Systematic and critical thinking Systematic and critical thinking
- (2) Ability to detect, interpret, and evaluate information on economics to solve problems creatively
- (3) Able to collect, analyze, and summarize the issues and needs
- (4) Able to apply knowledge and skills to solve problems in economics appropriately

Intellectual skill on this regard can be assessed by testing out the students' concept of problem solving and how to solve problems by applying the knowledge learned

●Major Responsibility ○ Minor Responsibility

3.2 Teaching methods

1) Case study of advanced economic and current issues
2) Discussion
3) Independent study

3.3 Evaluation

Evaluation of the learning results can be done based on actual works and performance of the students i.e. evaluation on the presentation in the class, test or interview.

4. Interpersonal skills and responsibility

4.1 Interpersonal skills and responsibility to be developed

Incorporated learning related with the following qualifications of the students into course:

- (1) Ability to communication foreign language effectively
- (2) Ability to assist and facilitate problem – solving both as a team leader and a team member
- (3) Ability to use the knowledge learned with the society appropriately
- (4) Responsible for personal actions and work within the group
- (5) Able to propose ways to resolve a situation, as well as present the position appropriately to both themselves and the group
- (6) Responsible for professional learning development continuously

●Major Responsibility ○ Minor Responsibility

4.2 Teaching methods

1) Have leadership
2) Able to work well with others
3) Responsible for the work assigned
4) Adaptability to the situation and organization culture at work place
5) Have good interpersonal skills with colleagues in organization and the general public

4.3 Evaluation

Evaluate the behavior and performance of students in group presentation in class, and observation

Curriculum Mapping
Expected learning outcomes

of behavior manifested in the activities.

5. Numeric analysis, communication and information technology skills

5.1 Numeric analysis, communication and information technology skills to be developed

- (1) Have the skills to use necessary tools available to work with the computer
- (2) Can suggest the solution using mathematics, econometrics to related problems creatively
- (3) Able to communicate effectively both orally and in writing as well as selecting appropriate presentation media
- (4) Able to use information and communication technologies appropriately

The learning outcome may be assessed during courses by having the students solve problems, analyze effectiveness of the solutions, and to introduce the concepts of the solutions, and also academic discussion between the lecturer and the students

●Major Responsibility ○ Minor Responsibility

5.2 Teaching methods

Arrange learning activities in the course for students to analyze various scenarios and realistic situations so that they can offer appropriate solutions, learn techniques in applying information technology in a variety of situations.

5.3 Evaluation

1) Evaluate from student presentations that use information technology tools, or mathematics and related statistics

2) Evaluate the ability to explain the reasons on using various tools and from discussion of case studies that were presented to classes

Section 5: Teaching and Evaluation Plan

1. Teaching Plan

Items/content	Number of hours	Lecturer
Week 1 Decision-Making under Uncertainty	3	Wisit Chaisrisawatsuk
Week 2 The General Equilibrium on Portfolio Decision	3	Wisit Chaisrisawatsuk
Week 3 Financial Markets and Pricing	3	Wisit Chaisrisawatsuk
Week 4 Firms and Financial Market	3	Wisit Chaisrisawatsuk
Week 5 Option Pricing	3	Wisit Chaisrisawatsuk
Week 6 Cooperate Finance	3	Wisit Chaisrisawatsuk
Week 7 Deposit Contracts and Banking	3	Wisit Chaisrisawatsuk
Week 8 Interest rate structure	3	Wisit Chaisrisawatsuk
Midterm Exam		
Week 9 Fundamental concepts of corporate Financial Economics	3	Sorasart Sukcharoensin

Items/content	Number of hours	Lecturer
Week 10 Corporate Financial decision making under certainty	3	Sorasart Sukcharoensin
Week 11 Capital structure theory	3	Sorasart Sukcharoensin
Week 12 Dividend Policy	3	Sorasart Sukcharoensin
Week 13 Capital budgeting under uncertainty and Real options in corporate finance	3	Sorasart Sukcharoensin
Week 14 IPO, M&A, and corporate governance	3	Sorasart Sukcharoensin
Week 15 Empirical corporate finance	3	Sorasart Sukcharoensin
Final Exam		

2. Instructional Media

- OHP media

3. Evaluation Plan

3.1 Assessment

The grading system for this course is distributed as follows:

Midterm examination	35%
Final examination	35%
Paper	15%
Presentation	15%

Section 6: Teaching Materials

6.1 Required textbooks and materials	
1.	**Main:** Jurgen Eichberger and Ian R. Harper., *Financial Economics*, Oxford University Press, 1997 **Additional:** S. LeRoy and J. Werner, *Principles of Financial Economics*, Cambridge University Press, 2001 Yvan Lengwiler, *Microfoundations of Financial Economics: An Introduction to General Equilibrium Asset Pricing*, Princeton University Press, 2004
6.2 Other important materials and information	
2.	-
6.3 Other recommended materials and information	
3.	**1 Equilibrium & Arbitrage** (a) Campbell, J. Y. 2000. "Asset pricing at the millennium." Journal of Finance, 55(4): 1515–1567. (b) Cochrane, J. H. 1999. "New facts in finance." The Center for Research in Security Prices Working Paper # 490,University of Chicago, Graduate School of Business. (c) Cox, J., Ingersoll, J., and Ross, S. 1985. "An intertemporal general equilibrium model of asset prices" Econometrica, 53: 363–84. (d) Varian, H. 1987. "The arbitrage principle in financial economics" Journal of Economic Perspectives, 1(2): 55–72. **2 Financial Markets**

(a) Arrow, K. 1964. "The role of securities in the optimal allocation of risk bearing" Review of Economics Studies, 31: 91–6.

(b) Diamond, P. 1967. "The role of a stock market in a general equilibrium model with technological uncertainty" American Economic Review, 57: 759–76.
(c) Duffie, D. 1991. "The theory of value in security markets." Chap 31 in Handbook of Mathematical Economics, vol. IV, edited by W. Hidenbrand and H. Sonnenschein. Amsterdam: North-Holland.

(d) Hansen, L. P., Heaton, J., and Luttmer, E. 1995. "Econometric evaluation of asset pricing models" The Review of Financial Studies, 8: 237–274.

(e) Hansen, L. P., and Jagannathan, R. 1991. "Implications of security market data for models of dynamic economies." Journal of Political Economy, 99: 225–262.

(f) Hansen, L. P., and Richard, S. F. 1987. "The role of conditioning information in deducing testable restrictions iimplied by dynamic asset pricing models" Econometrica, 55: 587–614.

3 Risk & Decision-Making under Uncertainty
(a) Werner, J.(2002), "Risk and Risk Aversion when States of Nature Matter" mimeo, revised 2004

(b) Campbell, J. 1996. "Understanding risk and return" Journal of Political Economy, 104: 298–354.

(c) Machina, M. 1987. "Choice under uncertainty: Problems solved and unsolved" Journal of Economic Perspectives, 1(1): 121–54.

(d) Merton, R. 1982. "On the microeconomic theory of investment under uncertainty" Chap. 13 in Handbook of Mathematical Economics, vol II, edited by K. Arrow and M. D. Intriligator. Amsterdam: North-Holland.

(e) Radner, R. 1982. "Equilibrium under uncertainty" Chap. 20 in Handbook of Mathematical Economics, vol. II, edited by K. Arrow and M. D. Intriligator. Amsterdam: North-Holland.

(f) Starmer, C. 2000. "Developments in non-expected utility theory: The hunt for a descriptive theory of choice under risk" Journal of Economic Literature, vol XXXVIII (June 2000): 332–382.

4 Mean-Variance Analysis & Optimal Portfolios
(a) Cochrane, J. H. 1999. "Portfolio advice for a multifactor world." The Center for Research in Security Prices Working Paper # 491, University of Chicago, Graduate School of Business. (Can be downloaded from the Social Science Research Network Electronic Paper Collection: http://papers.ssrn.com/paper.taf?abstract id=171724)

(b) Dybvig, P., and Ross, R. 1985. "Yes, the APT is testable" Journal of Finance, 40: 1173–88.

(c) Fama, E., and MacBeth, J. 1973. Risk, return and equilibrium: Empirical tests. Journal of Political Economy, 71: 607–36.

(d) Jagannathan, R. and McGrattan, E. R. 1995. "The CAPM Debate" Federal Reserve Bank of Minneapolis Quarterly Review 19, 4: 2–17.

(e) Lintner, J. 1965. "Security prices, risk and maximal gains from diversification" Journal of Finance, 20: 587–615.
(f) Markowitz, H. 1952. "Portfolio selection." Journal of Finance, 7: 77–99. 4

(g) Roll, R. 1977. "A critique of the asset pricing theory's tests. Part I: On past and potential testability of the theory" Journal of Financial Economics, 4: 129–76.

(h) Ross, S. 1976. Arbitrage theory of capital asset pricing. Journal of Economic Theory, 13: 341–60.

(i) Sharpe, W. 1964. "Capital asset prices: A theory of market equilibrium under conditions of risk." Journal of Finance, 19: 425–442.

5 Equilibrium Prices: Consumption-Based Asset Pricing

(a) Fama, Eugene F. and Kenneth R. French. 2004 "The Capital Asset pricing Model: Theory and Evidence", Journal of Economic Perspectives, 18(3): 25-46

(b) Perold, Andre F. 2004 "The Capital Asset Pricing Model" Journal of Economic Perspectives, 18(3): 3-24

(c) Campbell, J. Y. 2002. "Consumption-Based Asset Pricing." NBER Working Paper.

(d) Campbell, J. Y., and Cochrane, J. H. 1999. "By force of habit: A consumption-based explanation of aggregate stock market behavior." Journal of Political Economy, 107(2): 205–251.

(e) Campbell, J. Y., and Cochrane, J. H. 2000. "Explaining the poor performance of consumptioin-based asset pricing models" Journal of Finance, 55(6): 2863–2878.

(f) Flavin, M. 1983. "Excess volatility in the financial markets: A reassessment of the empirical evidence" Journal of Political Economy, 91: 929–56.

(g) Guvenen, F. 2002. "A parsimonious macroeconomics model for asset pricing: Habit formation or cross-sectional heterogeneity?" University of Rochester Working Paper.

(h) Hansen, L., and Jagannathan, R. 1991. "Restrictions on Intertemporal marginal rates of substitution implied by asset returns" Journal of Political Economy, 99: 225-62.

(i) Heaton, J. 1995. "An empirical investigation of asset pricing with temporally depend preferences specifications" Econometrica, 63(3): 681–717.

(j) Lucas, R. 1978. "Asset prices in an exchange economy" Econometrica, 46: 1429–45.

(k) McGrattan, E. R., and Prescott, E. C. 2001. "Taxes, regulations, and asset prices" Federal Reserve Bank of Minneapolis Working Paper.

(l) Mehra, R. 2003. The equity premium puzzle: Why is it a puzzle? NBER Working

Paper 9512.

(m) Mehra, R. and Prescott, E. 1985. "The equity premium: A puzzle" Journal of Monetary Economics, 15: 145–61.

(n) Mehra, R. and Prescott, E. 2003. "The equity premium in retrospect" Chapter 14 in Handbook of the Economics of Finance, edited by G. M. Constantinides, M. Harris and R. Stulz Elsevier.

(o) Merton, R. C. 1973. "An intertemporal capital asset pricing model." Econometrica, 41: 867–887.

6 Martingales and Asset Pricing

(a) Harrison, J., and Pliska, S. 1981. "Martingales and stochastic integrals in the theory of continuous trading" Stochastic Processes and Their Applications, 11: 215-60.

(b) Leroy, S. 1989. "Efficient capital markets and martingales" Journal of Economic Literature, 27: 1583–1621.

(c) Samuelson, P. 1965. "Proof that properly anticipated prices fluctuate randomly" Industrial Management Review, 6: 41–50.

7 Dynamic Optimization and other Methods

(a) Brock, W., and Mirmam, L. 1972. Optimal economic growth and uncertainty: The discounted case. Journal of Economic Theory, 4: 479–513.

(b) Sundaresan, S. M. 2000. "Continuous-time methods in finance: A review and an assessment." Journal of Finance, 55(4): 1569–1622.

8 The Term Structure of Interest Rates

(a) Campbell, J. 1995. "Some lessons from the yield curve" Journal of Economic Perspectives, 9(3): 129–52.

(b) Cox, J., Ingersoll, J., and Ross, S. 1985. A theory of the term structure of interest rates" Econometrica, 53: 385–408.

9 Options & Financial Derivatives

(a) Black, F. and Scholes, M. 1973. "The pricing of options and corporate liabilities" Journal of Political Economy, 3:637–54.

(b) Cox, J., Ross, S., and Rubinstein, M. 1979. "Option pricing: A simplified approach" Journal of Financial Economics, 7: 229–63.

(c) Heath, D., Jarrow, R., and Morton, A. 1992. "Bond pricing and the term structure of interest rates: A new methodology for contingent claims valuation" Econometrica, 60(1): 77–106.

(d) *Jarrow, R. A. 1999. "In honor of the Nobel Laureates Robert C. Merton and Myron S. Scholes: A partial differential equation that changed the world." Journal of Economic Perspectives, 13(4): 229–248.

(e) Merton, R. C. 1973. "Theory of rational option pricing' Bell Journal of Economics and Management Science, 4: 141–83.

	(f) *Merton, R. C. 1998. "Applications of option-pricing theory: Twenty-five years later." American Economic Review, 88(3): 323–349. (g) *Rubinstein, M. 1987. "Derivative assets analysis" Journal of Economic Perspectives, 1(2): 73–93. (h) *Scholes, M. S. 1998. "Derivatives in a dynamic environment." American Economic Review, 88(3): 350–370.

Section 7: Course Evaluation and Improvement

7.1 Evaluation Strategies on course effectiveness by students	
1.	Opinions on the course and the lecturer
2.	Class discussion between the lecturers and students
3.	Students' suggestions
7.2 Teaching evaluation strategies	
1.	Self evaluation
2.	Observation by teaching team
3.	Examination results/Learning outcomes
4.	Review of learning outcomes evaluation
7.3 Teaching Improvement	
1.	Improve teaching regarding students' suggestions, teaching evaluation results, and problems
2.	Classroom research
3.	Course detail improvement
4.	Meeting to develop teaching and learning
7.4 Review of students' academic performance	
1.	Form a committee to review students' learning outcomes evaluation
2.	Review students' scores and/or assignments
7.5 Course review and improvement plan	
1.	The evaluation results from item 1 and teaching evaluation from item 2 can be used to improve the course and teaching and learning methods
2.	Arrange meetings/seminars for lecturers to review and improve the course
3.	Improve the course annually regarding evaluation results