# City University of Hong Kong Course Syllabus

# offered by Department of Economics and Finance with effect from Semester A 2017/18

Part I Course Over	view
Course Title:	Trading Room Workshop
Course Code:	EF4323
Course Duration:	1 Semester
Credit Units:	3
Level:	<u>B4</u>
Proposed Area: (for GE courses only)	☐ Arts and Humanities ☐ Study of Societies, Social and Business Organisations ☐ Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: (Course Code and Title)	CB3410 Financial Management or FB3410 Financial Management EF3320 Security Analysis and Portfolio Management
Precursors: (Course Code and Title)	EF3333 Financial Systems, Markets and Instruments
<b>Equivalent Courses</b> : (Course Code and Title)	Nil
Exclusive Courses:	FF4322 Trading Room Workshop

#### Part II Course Details

#### 1. Abstract

Several studies, such as Flanegin and Rudd (2005), suggested that the divergence in subjects covered in university finance programs and those used by practitioners on a fairly consistent basis in their jobs do exist. This course aims to bridge the gap. To achieve the objective, the course is divided into four major parts. The first part of the course describes the various activities that go on inside a trading room. The second part of the course is technical analysis. The third part of the course is trading simulation using the Financial Trading System (FTS). The forth part is group project.

This course aims to provide students with:

- actual trading experience to supplement various segments of an investment course via experimental learning and simulated trading;
- the ability to apply finance theories to actual trading in different financial market;
- the ability to utilize popular professional databases to enhance financial analysis;
- an understanding of how insights of behavioural finance complement the traditional finance paradigm; and
- an understanding of major applications of technical analysis.

### 2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs <sup>#</sup>	Weighting* (if applicable)	Discov curricu learnin (please approp	lum rel g outco tick	ated omes
1.	Apply the finance theories to make informed investment decisions, such as identifying arbitrage opportunities, managing risk by hedging and portfolio management, and using financial leverage effectively, in laboratory trading environment; identify the activities that go on inside a trading room, the job descriptions and skill sets required for practitioners.	30 %	V	V	V
2.	Identify key differences between traditional finance and behavioural finance frameworks, including irrationality and limits to arbitrage, and understand key psychological biases that affect investment decision-makings; identify and apply finance theories to make informed investment decisions, such as identifying arbitrage opportunities and using financial leverage effectively, in a trading environment.	30 %	V	√	√ 
3.	Explain and apply technical analysis in financial markets; learn the technique of technical analysis for securities.	20 %	V	V	$\sqrt{}$

No.	CILOs#	Weighting*	Discov	ery-eni	riched
		(if applicable)	curricu	ılum rel	lated
			learnin	g outco	omes
			(please	tick	where
			approp	riate)	
			A1	A2	A3
4.	Critically evaluate the effectiveness of technical analysis;	10 %			
	design a trading system and critically evaluate its				
	effectiveness.				
5.	Utilise popular professional databases and electronic	10 %	$\sqrt{}$	V	V
	trading platform, to enhance financial analysis; learn to				
	trade using Financial Trading System.				
* If	gighting is assigned to CILOs, they should add up to 100%	1000/			

<sup>\*</sup> If weighting is assigned to CILOs, they should add up to 100%.

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

#### 3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.					Hours/week	
						(if applicable)		
		1	2	3	4	5		
Simulated	Students will apply finance theories in	$\sqrt{}$					3 weeks, 3	
trading games	making informed investment decisions, and						hours per	
and	apply technical analysis in trading						week	
after-game	simulation. Students will discover for							
discussions	themselves effective actions, alternatives							
(FTS system)	and solutions to different situations in							
	trading simulations and apply the							
	knowledge and skills they acquired in a							
	traditional classroom.							
In-class	Students will discover technical analysis	$\sqrt{}$					4 weeks, 3	
discussions	and theories of behaviour finance through						hours per	
	case analysis and in-class discussions. An						week	
	in-depth discussion will encourage students						Week	
	to integrate the concepts and knowledge							
	they acquired.							

<sup>#</sup> Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

TLA	Brief Description	CILO No.					Hours/week (if applicable)	
		1	2	3	4	5	(ii applicable)	
Group Project	The project is an empirical test of	1	$\sqrt{}$	1	1	1	1 week, 3	
and	traditional technical trading rules of						hours	
Presentation	self-developed automatic trading systems.							
(Trading	With the hypothetical 500,000 HKD,							
Simulation)	students in a group will develop a portfolio							
	of liquid securities such as FX, stocks, stock							
	indices, and commodities. Students are to							
	identify trading signals and record the							
	realistic prices to execute the trade.							
	Students are required to keep a trading log							
	for each week.							
	They will submit an in-depth study report							
	with an executive summary. The report							
	should focus on selected chart patterns or							
	technical indicators.							
	The students will then give a 15-minute							
	presentation of the report. The presentation							
	will help students practise their presentation							
	skills and acquire deep understanding of the							
	trading techniques and behavioural finance.			,	,	,		
Demonstration	Professional financial databases will be						1 week, 3	
and self	used to help students understand market						hours	
practice by	conventions for equity trading. Students							
using	have to understand the prevalent trading							
professional	quotes; explore and interpret popular							
financial	technical analysis indicators; and practice							
databases	buying/selling trading tickets. This							
	encourages students' acquisition and							
	application of research skills, and creation							
	of new knowledge.							

# 4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.				Weighting*	Remarks	
	1	2	3	4	5		
Continuous Assessment: 100%							
Group Project of Trading						50%	
simulation							
FTS system trading games	1	V	1	$\sqrt{}$	1	30%	
Participation and Attendance						20%	
Examination: 0% (duration: hours	Examination: 0% (duration: hours, if applicable)						
* The weightings should add up to 100%.						100%	

<sup>\*</sup> The weightings should add up to 100%.

# 5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent	Good	Fair	Marginal	Failure
		(A+, A, A-)	(B+, B, B-)	(C+, C, C-)	(D)	(F)
Group Project of	Effective trading	Trading strategy	Trading strategy	Trading strategy	Trading strategy	Trading strategy
Trading simulation	strategy;	generates good	generates OK	generates some	generates insignificant	losses money;
	Successful VBA	Sharpe ratio;	Sharpe ratio;	profit;	return;	VBA code doesn't
	coding;	Efficient VBA	Effective VBA	OK VBA coding;	VBA code just work;	work
	High quality report;	coding;	coding;	Report is OK;	Report is readable;	Report is painful to
	Informative	Report is accurate	Good Report;	OK presentation	OK presentation	read;
	presentation	and informative;	Good presentation			Bad presentation
		Very good				
		presentation				
FTS system trading	Effective reaction to	Top 10% trading	Top 11% to 40%	Top 41% to 70%	Top 71% to 90%	Bottom 10% trading
games	market information	profit	trading profit	trading profit	trading profit	profit
	and the use of					
	profitable trading					
	actions					
Participation and	Show up on time and	Show up > 90%	Show up $> 80\%$	Show up > 70%	Show up > 70%	Show up < 70%
Attendance	be proactive in class	Very active in	More active than	Somewhat active	Marginally active	Not active
		class	average student			

# **Part III** Other Information (more details can be provided separately in the teaching plan)

# 1. Keyword Syllabus

Market Efficiency.

Portfolio Theory.

Valuation Models.

Derivatives.

Technical Analysis.

Behavioral Finance.

# 2. Reading List

# 2.1 Compulsory Readings

(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Larry Harris, <u>Trading and Exchanges: Market Microstructure for Practitioners, Current Edition</u> ,
	Oxford University Press
2.	John Teall, Financial Trading and Investing, Current Edition, Academic Press
3.	Kirkpatrick, Charles D., and Dahlquist, Julie. R., <u>Technical Analysis: The Complete Resource</u>
	for Financial Market Technicians, FT Press, Pearson.
4.	Pring, M., Technical Analysis Explained, McGraw Hill.
5.	Shleifer, Andrei, <u>Inefficient Markets: An Introduction to Behavioral Finance</u> , Oxford University
	Press.
6.	Shefrin, Hersh, Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology
	of Investing, Oxford University Press.
7.	Thaler, Richard H. (ed.), <u>Advances in Behavioral Finance</u> , Vol. II, Princeton.
8.	The Reuters Financial Training Series, The Reuters.
9.	Bauer Jr. R. J., and Dahlquist, J R., Technical market indicators: analysis & performance, John
	Wiley & Sons, 1999.
10.	Benninga, S., <u>Principles of Finance with Excel</u> , Oxford University Press, 2006.
11.	Bulkowski, Thomas N., Encyclopedia of Chart Patterns, 2nd Edition, John Wiley & Sons, 2005.
12.	Kirkpatrick, Charles D., and Dahlquist, Julie. R., <u>Technical Analysis: The complete resource for</u>
	financial market technicians, FT Press, Pearson, 2008.
13.	Murphy, J., Technical Analysis of the Financial Markets: A comprehensive guide to trading
	methods and applications, New York Institute of Finance, 1999.
14.	Pring, Martin J., <u>Technical Analysis Explained</u> , 4th Edition, McGraw-Hill, 2002.
15.	Park, Cheol-Ho and Irwin, Scott H., The Profitability of Technical Analysis: A Review,
	AgMAS Project Research Report, 2004.
16.	Nison. S., <u>Japanese Candlestick Charting Techniques</u> , New York Institute of Finance, 1991.
17.	James Angel, L. Harris, and C. Spatt, Equity Trading in the 21st Century, Quarterly Journal of
	<u>Finance</u>
18.	Jonathan Tse, X. Lin, and D. Vincent, <u>High Frequency Trading – The Good, The Bad, and the</u>
	Regulation, Credit Suisse.
19.	Jonathan Tse, X. Lin, and D. Vincent, <u>High Frequency Trading – Measurement</u> , <u>Detection and</u>
	Response, Credit Suisse.

2.2 Additional Readings
(Additional references for students to learn to expand their knowledge about the subject.)

Onlin	Online Resources					
1.	Financial Trading System www.ftsweb.net					
2.	Websites from the HKEx, SFC, Bloomberg, Reuters etc.					
3.	http://www.investopedia.com/					
4.	http://stockcharts.com/school/doku.php?id=chart_school					
5.	http://thepatternsite.com/					
6.	http://finance.yahoo.com/					