

COURSE OUTLINE: BU5202 INVESTMENTS

Academic Year	2022-2023	Semester	1
Course Coordinator	Thong Tiong Yang		
Course Code	BU5202		
Course Title	Investments		
Pre-requisites	BU5201		
No of AUs	3		
Contact Hours	39		
Proposal Date	S1/AY2022-2023		

A) Course Aims

This course is an advanced level subject in finance. The objective of this course is to provide and equip you with a solid knowledge and skills in investment and portfolio management. The course begins with a series of discussions and dialogues in essentials of investments, mechanisms of financial markets, various asset classes and its risk and return, assets allocation, portfolio management. Next, the valuations of stock and bond, and its critics will be discussed in details. In addition, derivatives, specifically futures and options, i.e. index futures trading, will be shared and discussed. Last but not least, the sustainability and social responsibilities of investments in 21st century should not be ignored in this course.

In this course, you will also go through the applications of investments, such as CAPM, corporate finance topics inclusive in the portfolio investment strategies, i.e. earnings announcement, Mergers & Acquisitions (M&As), Initial Public Offerings (IPOs), dividend announcement, Strategic Alliances, etc., by applying and bridging the theories and practice acquired in this course. Thus, this course is beneficial to your personal investments and careers after you graduate from NTU.

Question: This world embraces with risks and uncertainties, i.e. COVID-19 is a good example. What do you think about the statement “High Risk High Return”, and what does it mean to you? Do we have the solution for it (risk)? Let’s find it out in this course.

B) Intended Learning Outcomes (ILO)/Objectives

The objective of the course is to provide you with the essential finance knowledge, tools and skills needed to make sound investment decisions throughout your life in order to live well. Specifically, we will achieve the following learning outcomes after completing this course.

- LO1: Analyse the essential of investments and wealth
- LO2: Evaluate the mechanisms and innovation of financial markets: How it works and what are new?
- LO3: Apply the valuation of stock and critically analyse its application
- LO4: Apply the valuation of bond and discuss its opportunities, development and challenges for the retail investors on SGX including Singapore Savings Bond (SSB)
- LO5: Critically evaluate the derivative contracts, i.e. futures and options
- LO6: Create asset allocation and incorporate the processes of portfolio management in investments
- LO7: Raise the awareness of sustainability and social responsibility in investments
- LO8: Have a practical knowledge of analytical skills to develop, construct, and implement sound investment strategies independently and collectively

C) Course Content

1. Introduction to finance and investments
2. Time value of money revisit and financial markets and structures
3. Risk and return. What is the diversification concept in finance?
4. Asset pricing models, i.e. CAPM, FF-3 Factors model, APT, etc., and their applications
5. Asset allocation and portfolio management
6. Investment strategies and market reaction of firms' financial decisions
7. Financial assets valuation
8. Financial derivatives
9. Sustainable investments

D) Assessment (includes both continuous and summative assessment)

Component	ILO Tested	NBS Learning Goal (Refer to Annex E for list)	Weighting	Team/Individual	Assessment Rubrics (Please insert rubrics as Appendix)
1.	Weekly ILO	Critical Thinking, Acquisition of knowledge	15%	Individual	Class participation rubric
2. Group Project	All ILOs	Critical Thinking, Creative Thinking, and Application of Knowledge	25%	Group Each group submit the final presentation slides which are self-explanatory. Peer evaluation is compulsory (Refer to P.12).	Critical thinking rubric
3. Group Presentation	All ILOs	Oral Communication, Teamwork and Interpersonal Skills	10%	Group All group members are required to present their projects in class.	Oral communication rubric
4. Final Exam	All ILOs	Critical Thinking, Acquisition of knowledge and Application of Knowledge	50%	Individual	N.A.
Total			100%		

Important Notes:**Class Participation (15%)**

- *Active participation and discussion are strongly encouraged in class. Web discussion topics will occasionally be posted in NTULearn. Please feel free to post your analysis supporting it with references and links, in the course site. Where the links are long, please provide a summary as part of your analysis.*

Group Project (25%)

- *Group project is designed to encourage teamwork and provide you the opportunity to apply the knowledge and skills learned in this course. Importantly, you have chance to learn and practice how to plan for your financial from identifying your goals, developing your strategic intents, to realizing your dreams.*
- *Preferred group size is Five (5) members forming no later than week 3, exceptions to this point will have to be pre-approved by the instructor.*

Group Presentation (10%)

Presentation will be held in Week 12 and/or Week 13.

See Annex A.

E) Formative feedback

The course will be highly interactive and feedback relating to critical thinking and oral communication will be given verbally directly to participating individuals and groups on the spot.

Hands-on and in-class practices are used to facilitate discussions on areas of application of asset pricing models, i.e. CAPM, relative valuation model, FCFE, etc., to bridge between theories and practice in investments. The process encourages analytical thinking and requires a constant validation of understanding where ambiguities and inconsistencies can be resolved.

F) Learning and Teaching approach

Approach	How does this approach support you in achieving the learning outcomes?
<i>Seminars</i>	<i>The interactive seminar session where there is ample opportunities for open discussion on the conceptual questions raised in the class allows you to think critical and share their ideas and concept with the class. This also allows me to get the concepts clearly through the entire class by involving you and ensure that the targeted learning outcomes are being achieved</i>
<i>In-Class activities</i>	<i>Some learning outcomes for this course are skills which are practical in nature and cannot be achieved by reading and writing. The achievement of such learning outcomes requires personal experience, real-life examples using news reports and cases, and in-class activities to provide such opportunities.</i>
<i>Project Briefing</i>	<i>Discuss the financial investment project as we are progressing throughout the semester.</i>

G) Reading and References

1. Investment Analysis and Portfolio Management 10th Edition

Frank K. Reilly & Keith C. Brown

ISBN-13: 9780538482103 | ISBN-10: 0538482109

2. In-class supplementary material

See Annex B.

H) Course Policies and Student Responsibilities**(1) General**

You are expected to complete all assigned pre-class readings and activities, attend all seminar classes punctually and take all scheduled assignments and tests by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions they have missed. You are expected to participate in all seminar discussions and activities.

(2) Absenteeism

Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies.

If you miss a lecture, you must inform the course instructor via email prior to the start of the class.

I) Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

J) Course Instructors

Instructor	Office Location	Phone	Email	Consultation Hours
T Y Thong	S3-01A-19		tythong@ntu.edu.sg	By prior appointment via email

K) Planned Weekly Schedule

Week	Topic	Learning Objectives	ILO #	Readings/Activity
1	<ul style="list-style-type: none"> Review BU8201 Business Finance Introduction to investments 	<ul style="list-style-type: none"> Recap firm theory Critically analyse various financial instruments 	ILO 1	Mind Map created by TY In-class discussion
2	<ul style="list-style-type: none"> Introduction to financial markets Mechanisms of financial markets 	<ul style="list-style-type: none"> Discuss the essentials of various markets Evaluate the operations of financial markets 	ILO 2	Chapter 1 to 3 Website demonstration

		<ul style="list-style-type: none"> Apply the trading mechanisms 		
3	<ul style="list-style-type: none"> Risk and return Diversification 	<ul style="list-style-type: none"> Discuss the relationship between risk and return Diversification is the rule of thumb in investment 	ILO 6	Chapter 4
4	<ul style="list-style-type: none"> Capital Asset Pricing model (CAPM) Arbitrage Pricing Theory (APT) Other Models 	<ul style="list-style-type: none"> Understand the factors determining the stock return Alternative models will be discussed 	ILO 3	Chapter 5 to 7 News reports
5	<ul style="list-style-type: none"> Asset allocation Portfolio formation 	<ul style="list-style-type: none"> Evaluate various asset classes Form portfolio to achieve the objective of investments 	ILO 6 & 8	Ch 8 to 9 Journal articles
6	<ul style="list-style-type: none"> Portfolio formation & performance measurement Mutual funds vs hedge funds strategies & performance 	<ul style="list-style-type: none"> Evaluate portfolio performance Understand various strategies of managed funds 	ILO 3, 4 & 5	Chapter 21 Journal articles
7	<ul style="list-style-type: none"> Stock valuation Rational vs behavioural finance 	<ul style="list-style-type: none"> Critically evaluate stock valuation theories Application of investment strategies 	ILO 3	Chapter 10-13 In-class activities
8	Recess			
9	<ul style="list-style-type: none"> Stock market micro-structure Stock trading mechanisms 	<ul style="list-style-type: none"> Evaluate the trading mechanisms of stocks on exchanges Unveil the truth of stock trading 	ILO 3, 6 & 8	In-class activities Hands-on practice
	<ul style="list-style-type: none"> Bond valuation Term structure of interest rate 	<ul style="list-style-type: none"> Analyse how bond is valued Application of term 	ILO 4, 6 & 8	Chapter 14 to 16 Website demonstration

10	<ul style="list-style-type: none"> Bond portfolio 	<ul style="list-style-type: none"> structure of interest rate and bond strategies 		
11	<ul style="list-style-type: none"> Derivatives Index Futures Trading 	<ul style="list-style-type: none"> Evaluate futures and options Uses of derivatives in risk management 	ILO 5 & 6	Chapter 17 to 19 App demonstration
12	<ul style="list-style-type: none"> Sustainability and social responsibility of investment 	<ul style="list-style-type: none"> New paradigm in investment Essential of sustainable investing 	ILO 7	News reports In-class discussion
13	<ul style="list-style-type: none"> Group Project Presentation Possibly two weeks (Wk12 & 13) 	<ul style="list-style-type: none"> Application of knowledge and skills Problems solving 	ILO 8	Group activities Presentation slides
FINAL EXAMINATION (2 HOURS) Date and time to be confirmed in due course				

ANNEX A: ASSESSMENT CRITERIA

a. Group Project Instructions

1. Group size: maximum 5 members. No solo is allowed.
2. Format: Powerpoint slides (No written report). Slides must be self-explanatory.
3. Project Theme: Selected topics from the list.
4. Conduct the research and study during our recess week holidays.

b. Final Project Presentation

1. The final presentation for your project is scheduled in Week 12 and 13. To be confirmed.
2. Submission Date: Submit your final project (powerpoint slides) hard copy during presentation, and soft copy (final revised) to the Dropbox on NTULearn by Friday of Week 13 before the end of the business day 17:00 pm.
3. Instructions:
 - i. Identifying the objectives of your project.
 - ii. Survey the target respondents by a set of specific questions in your questionnaire. If the project is not in survey method, please research and analyze the relevant data and information from the sources.
 - iii. Collate the information and data as much and fast as possible across the age groups. Demographic information is crucial for survey.
 - iv. Compute the statistics from your data.
 - v. Present your findings in various forms, i.e. tables, charts, descriptions, comments, etc.
 - vi. Issues, concerns and lessons learnt. Changes and comparison with other studies and literature (if any).
 - vii. Summary and conclusion.
 - viii. Recommendation for personal financial planning, i.e. short-, medium-and long-term, over our life cycle based on your project topic only.
 - ix. Disclaimer.
 - x. References.

ANNEX B: NOTES AND SAMPLES

A NOTE ON TEAMWORK ASSESSMENT & PEER EVALUATION

** For course coordinator/instructor's note & not to be included in the course outline*

A student's ability to work in, and lead, a team is an important skill for his/her future career progression and development. As such, courses are encouraged to incorporate team activities as part of the course continuous assessment.

Consistent with the outcome-based teaching and learning pedagogy, course instructors that plan to incorporate teamwork will need to think through the learning objectives that they want to achieve through the team activities including behaviors that students should exhibit during teamwork.

To motivate and assess students' learning in teamwork, assessment should be aligned with the planned learning objectives and meaningful feedback should be provided to the students. As instructors may not be able to directly observe, assess and provide feedback to students in terms of their performance in teams, peer evaluation is likely the best alternate form of assessment and feedback to help students develop their teamwork skills. Courses are strongly encouraged to conduct peer evaluation or put in place other means for students to learn and receive feedback from their team members.

In aligning teamwork assessment with peer evaluation, different assessment methods are likely to have their own pros and cons. As such, instructors should discuss and agree on the teamwork assessment method to be used in a course. In deciding on a teamwork assessment method, considerations should be given to circumstances under which and how a member's teamwork mark may be increased, unchanged and/or decreased in light of student peer evaluations and free-riding concerns (including the availability of evidence and opportunities provided to affected members to voice their side of the story). Where peer evaluation is not compulsory, instructors are encouraged to request a positive confirmation from all members that every member has contributed significantly to the team assignment (as opposed to a negative confirmation where students inform instructors only of free-riding issues in their teams). The adopted assessment method for team assignments should be clearly conveyed to all students upfront and stated in the course outline together with the other course assessment components. In addition, changes in assessment criteria and methods (including team assignments) midway in the course should be avoided unless all students are informed and agreeable.

For illustration purposes, attached is a sample of peer evaluation method used in an undergraduate course where members' marks are reduced if their average peer rating is found to be on the low side (<4 on a scale of 1 to 7).

Instructors are strongly recommended to use the online Teamwork & Interpersonal Skills Rubric available in eUreka.

CONFIDENTIAL PEER EVALUATION FORM FOR TEAM PROJECT

Member's name: _____

Seminar group and team number: _____

Please use the attached Peer Evaluation Rubric to evaluate yourself and your team members on each of the 5 stated attributes (on a scale of 1 to 7). State your ratings for yourself and each of your team members in the table below. For your self-assessment, insert "(Self)" after your name in the table below.

Index #	Name of team members	1 - RR	2 - CM	3 - CR	4 - CT	5 - RS	Average Rating
1							
2							
3							
4							
5							
6							

If any of your ratings above is < 4, please provide a brief explanation to justify the ratings.

Index #	Brief explanation to justify a rating of < 4

You may attach supporting documents (like emails and screen shots), if any, to support your explanations above.

Teamwork & Interpersonal Skills (Peer Evaluation) Rubric**Learning Objective: The ability to work effectively with others in a group setting.**

Traits	Performance	
<u>1. Roles and Responsibility (RR)</u> Behaves professionally by upholding responsibility and assuming accountability for self and others in progressing towards the team's goal.	Scant Unclear about his/her own role; refuses to take a role in the group; insists to work individually and has limited coordination or communication with others.	Substantially Developed Always fulfills responsibilities; performs his/her role within the group with enthusiasm and demonstrates willingness to work collaboratively.
Evaluation: Scant <u>1 2 3 4 5 6 7</u> Substantially Developed		
<u>2. Communication (CM)</u> Identifies appropriate mechanisms to coordinate and correspond with team members.	Scant Modes of communication are not appropriate, causing confusion and miscommunication among team members.	Substantially Developed Modes of communication are appropriate, and maintaining timely communication and correspondence with team members.
Evaluation: Scant <u>1 2 3 4 5 6 7</u> Substantially Developed		
<u>3. Conflict Resolution (CR)</u> Resolves conflicts using a variety of approaches.	Scant Does not recognize conflicts or is unwilling to resolve conflicts.	Substantially Developed Consistently resolves conflicts through facilitating open discussion and compromise.
Evaluation: Scant <u>1 2 3 4 5 6 7</u> Substantially Developed		
<u>4. Contributions (CT)</u> Contributes positive input for the team; effectively utilizes one's knowledge and expertise.	Scant Largely disinterested in working in a group and refuses to participate; observes passively or is unwilling to share information with other team members.	Substantially Developed Actively attends and participates in all activities and provides meaningful contribution in articulating ideas and opinions.
Evaluation: Scant <u>1 2 3 4 5 6 7</u> Substantially Developed		
<u>5. Relationship (RS)</u> Maintains cooperative interaction with other team members regardless of individual /cultural differences and respects diverse perspectives.	Scant Rarely listens to others and does not acknowledge the opinions that differ from his/her own.	Substantially Developed Engages in respectful relationships with all other members in the team. Embraces and accepts diverse points of view without prejudice.
Evaluation: Scant <u>1 2 3 4 5 6 7</u> Substantially Developed		

References:

Teamwork Value Rubric - Association of American Colleges and Universities. Retrieved from <http://www.aacu.org/value/rubrics/pdf/teamwork.pdf>.

SAMPLE OF ASSESSMENT COMPONENT**c. Team Case Research Study Presentation (30 min)**

- i. Pick an Asia-based company (e.g. Shopee, BreadTalk, Osim) that are currently regional/international but with the potential to be more global in their business (therefore, no SIA, Keppel, Sembawang and others that are already fairly well established globally). Give a brief description of its business.
- ii. Outline in what ways this company can become more global (i.e. what should its strategy be to become a global player). In doing so, also highlight its comparative advantages, its unique business propositions, its key success factors, the challenges it will face, etc. Use all research means, including interviewing the company (if need be) to complete the study.

d. Individual Research Essay (10 to 15 pages, double-spacing):

You are to write an essay on one of the suggested topics (below). The following are some suggested topics. Students can opt to write on any global marketing-related topics so long as permission is obtained from your instructor.

1. Can politics ever be detached from business? Why and why not? Cite examples, including those from various industries, to support your arguments. How then can companies overcome the influence of politics in developing global business strategies?
2. What's the roles of creativity and innovation in the development of global business strategies and markets? What practical ways/steps can companies (especially those from Asia) take to ensure that they can improve in these areas? What roles can governments and tertiary institutions play in these areas?
3. High technology, digitalization and artificial intelligence have arrived in the world in the most impressive and massive ways. How would they affect the ways businesses will be conducted globally?
4. In global business competition, is there scope for smaller players? How can smaller players grow in this highly competitive world (Note: All global companies started as small, e.g. Dell, Microsoft, Kentucky Fried Chicken, etc.)
5. What is your assessment of the current US-China trade frictions? Will it get better or worse in the future, and who will win? How would such frictions affect the relationships of these two countries in other areas?
6. Any other topic approved by your instructor. You need to speak to your instructor by Week 05.