

## **Annexe A: New/Revised Course Content in OBTL+ Format**

### **Course Overview**

The sections shown on this interface are based on the templates [UG OBTL+](#) or [PG OBTL+](#)

If you are revising/duplicating an existing course and do not see the pre-filled contents you expect in the subsequent sections e.g. Course Aims, Intended Learning Outcomes etc. please refer to [Data Transformation Status](#) for more information.

Expected Implementation in Academic Year	AY24
Semester/Trimester/Others (specify approx. Start/End date)	Semester 1
Course Author * Faculty proposing/revising the course	Chua Boon Seng
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Course Title	INVESTMENTS
Course Code	BF2219
Academic Units	140
Contact Hours	140
Research Experience Components	Not Applicable

## Course Requisites (if applicable)

Pre-requisites	AB1201 or RE8005. All students (especially students who were exempted from taking AB1201 Financial Management) should review the AB1201 Financial Management material before attending the BF2219 Investments course.
Co-requisites	
Pre-requisite to	
Mutually exclusive to	
Replacement course to	
Remarks (if any)	

## Course Aims

This is an introductory but demanding course in investments. This course endeavours to provide the basic understanding and tools to conduct portfolio analysis, make investment decisions, and manage portfolios. By the end of this course, students should have a broad understanding of investments and portfolio management. This course covers the analysis of various investment vehicles (equity, bonds, and options), allocation of assets, and modern portfolio theory. Students will learn valuation, portfolio construction and evaluation techniques, and apply investment techniques using Excel.

Students are expected to review Financial Management. To maximize acquisition of new knowledge, the instructors will not cover overlapping topics with Financial Management but these topics remain examinable.

## Course's Intended Learning Outcomes (ILOs)

Upon the successful completion of this course, you (student) would be able to:

ILO 1	Explain various financial assets and instruments, and the mechanics, risk, and calculations involved in trading financial assets.
ILO 2	Explain the relationship between risk and return, and capital allocation.
ILO 3	Explain the optimal risky portfolio and efficient diversification.
ILO 4	Apply Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT), and Multi-factor models.
ILO 5	Distinguish different forms in Efficient Market Hypothesis (EMH) and their implications on investment decisions
ILO 6	Evaluate the performance of mutual funds and other portfolios.
ILO 7	Interpret the yield curve and the effect of duration and convexity on bond pricing.
ILO 8	Explain options trading strategies and pricing.

## Course Content

Each week, we will distribute (electronically, on NTULearn) one deck of slides prior to the start of their seminar session. Reading the slides prior to the seminar is a mandatory requirement. During the seminar, we will discuss key conceptual issues related to modern investment theory and learn how to apply the conceptual tools to real-life investment decisions. Students are expected to read ahead before coming to class and to actively participate in classroom discussion. Key topics: Asset Classes and Financial Instruments; Securities Markets and Trading; Risk and Return: Past and Prologue; Efficient Diversification; Index Model; Capital Asset Pricing; Arbitrage Pricing Theory; Multi-factor Models; The Efficient Market Hypothesis; Mutual Funds and Other Investment Companies; Portfolio Performance Evaluation; Bond Markets; Managing Bond Portfolios; Options Markets and Valuation

## Reading and References (if applicable)

Required Textbook: Essentials of Investments. Zvi Bodie, Alex Kane and Alan J. Marcus. McGraw-Hill, Ed 10e. (Call No. HG4521.B667E, Reserve HG4521.B667). BKM.

## Planned Schedule

Week or Session	Topics or Themes	ILO	Readings	Delivery Mode	Activities
1	Overview - Fundamentals of Financial Economics	1	Lecture Notes	In-person	
2	Overview of Securities Markets* Risk and Return: Past and Prologue**	1	Lecture Notes Ch 2*, 3*, 5** of Textbook (BKM)	In-person	
3	Efficient Diversification* Capital Asset Pricing**	2	Lecture Notes Ch 6*, 7** of Textbook (BKM)	In-person	
4	Capital Asset Pricing* Arbitrage Pricing Theory* Multi-factor Models*	3	Lecture Notes Ch 7* of Textbook (BKM)	In-person	
5	The Efficient Market Hypothesis* Behavioural Finance**	4	Lecture Notes Ch 8*, 9** of Textbook (BKM)	In-person	
6	Asset Classes and Financial Instruments*. Securities Markets** Market Microstructure	4	Lecture Notes Ch 1, 2*, 3** of Textbook (BKM)		

Week or Session	Topics or Themes	ILO	Readings	Delivery Mode	Activities
7	Mutual Funds and Other, Investment Companies* Portfolio Performance Evaluation** Problem solving and Q&A	4	Lecture Notes Ch 4*, 18**, 20* of Textbook (BKM)	In-person	
8	Bond Prices and Yields	5	Lecture Notes Ch 10 of Textbook (BKM)	In-person	
9	Managing Bond Portfolios	6	Lecture Notes Ch 11 of Textbook (BKM)	In-person	
10	Other Fixed Income Securities* Securities Markets** Problem solving and Q&A	7	Lecture Notes Ch 10*, 2**, 3** of Textbook (BKM)	In-person	
11	Derivatives 1 Options Markets and Valuation	7	Lecture Notes Ch 15, 16 of Textbook (BKM)	In-person	
12	Derivatives 2 Futures Markets and Valuation Problem solving and Q&A	8	Lecture Notes Ch 17 of Textbook (BKM)	In-person	

## Learning and Teaching Approach

Approach	How does this approach support you in achieving the learning outcomes?
Seminar	The interactive seminar session where there are ample opportunities for open discussion on the conceptual investments questions raised in the class allows students to think critically and share their ideas and concept with the class. This also allows the instructors to get the concepts clearly through the entire class by involving students and ensure that the targeted learning outcomes are being achieved.
Individual Home work	The assignments require students to analyse, calculate and interpret various concepts, theories, and practical examples as learned in the class.
Excel Assignment	Apply portfolio theory and investment techniques using EXCEL in groups.

# Assessment Structure

Assessment Components (includes both continuous and summative assessment)

No.	Component	ILO	Related PLO or Accreditation	Weightage	Team/Individual	Rubrics	Level of Understanding
1	Continuous Assessment (CA): Assignment(Homework (x4) (online MCQs))	1-8	1-3	20	Individual	Holistic	Multistructural
2	Continuous Assessment (CA): Assignment(Excel Assignment)	1-5	1-4	15	Team	Holistic	Not Applicable
3	Continuous Assessment (CA): Presentation(Presentations)	1-8	1-3	10		Holistic	Not Applicable
4	Continuous Assessment (CA): Presentation(Presentations)	1-8	1-4	10	Team	Holistic	Not Applicable
5	Continuous Assessment (CA): Test/Quiz(Quiz)	1-8	1-3	45	Individual	Holistic	Not Applicable

## Description of Assessment Components (if applicable)

C1. Homework (20%) is due at mid-night on the stated due date as specified in the proposed weekly schedule. Please budget enough time to ensure that you have enough time to submit.

The homework is in the form of online Multiple-AnswerQuestions (MAQs), accessible on NTULearn (<https://ntulearn.ntu.edu.sg/>) under the main BF2201/2219course website.

There are 4 times in total. Each homework is worth 5%, and a 1% penalty will be deducted from the final score for every day (24 hours) the homework is late. You will not be able to submit the homework once the solutions are posted on the following Monday, and you will receive a 0%.

WARNING: There may be unforeseen last-minuteissues with the NTU Learn website. Computer/internet/NTU Learn issues are not valid excuses for failure to submit homework on time.

C2. Excel assignment (20%) can be done in groups of not less than FOUR (4) and not more than SIX (6) students. Each session is expected to have 8 groups. The report is due in class on week 9. 1% will be deducted for each day of late submission. Please refer to Appendix 2 for the detailed assessment criteria.

C3. Absence from class will affect your participation marks.

This course requires you to be in class to participate in activities and discussions. There will be no make-up opportunities for in-class activities. If you will be absent from a seminar session, you must inform your instructor via email prior to the start of the class.

If you are unable to attend your registered session in a particular week, you may request from your

instructor to attend his/her other sessions. Note that you cannot register for a particular session and attend a different session permanently. You are discouraged from attending sessions by other instructors as the pace will be different and your participation scores will not be transferred. Please refer to H) for the schedule for all the sessions.

C4. Each group is required to present at least once for the course on the pre-assigned questions. Every member is required to present.

C5. The quiz is online and consists of MAQs. The quiz is open-book and 2-hour in duration. The intent of the final quiz is to determine how well you understand the basic principles and tools of investments, and if you are able to apply them to novel as well as routine situations.

The date will be decided by the university. It is expected to be held on 20st April between 9:30 AM -12:00 AM. We may have to do it offline via computer labs due to university policy.

ψ1= Critical Thinking; 2=Acquisition of Knowledge; 3= Problem Solving & Decision Making; 4= Teamwork & Interpersonal Skills.

# Peer evaluation is compulsory and incorporated when there is group work as a continuous assessment. See Appendix 3 for the form.

i. Peer evaluation will be conducted in the last seminar of the semester.

ii. Each student will be provided with a form to fill.

iii. Excel assignment and participation marks will be adjusted based on peer evaluation.

### Formative Feedback

Feedback is central to this course. You will receive written feedback in response to your Excel Assignment report, as instructors will return each report back to each group.

## **NTU Graduate Attributes/Competency Mapping**

This course intends to develop the following graduate attributes and competencies (maximum 5 most relevant)

Attributes/Competency	Level
Collaboration	Intermediate
Communication	Intermediate
Value Creation	Intermediate
Critical Thinking	Intermediate



# Course Policy

## Policy (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. On the use of technological tools (such as Generative AI tools), different courses / assignments have different intended learning outcomes. Students should refer to the specific assignment instructions on their use and requirements and/or consult your instructors on how you can use these tools to help your learning. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

## Policy (General)

NA

## Policy (Absenteeism)

NA

## Policy (Others, if applicable)

Important Issues to note:

1. Reading the slides prior to the seminar is a mandatory requirement. The seminar session focuses on how to apply the ideas and concepts of asset pricing described in the seminars.
2. It is the student's responsibility to review materials from Financial Management. Emphasis is on new materials not covered in Financial Management. Fulfilment of the pre-requisite course Financial Management is a necessary (albeit insufficient) condition for you to do well in this course. Do not register for this course if you have not taken Financial Management before.
3. On participation (10%): Individual/Group.
4. If you cannot come for your registered session in a particular week, you may request from your instructor to attend his/her other sessions. Note that you cannot register for a particular session and attend a different session permanently. You are discouraged from attending sessions by other instructors as the pace will be different and your participation scores will not be transferred. Schedule for all sessions is as shown below.
5. If you have a medical condition and need special arrangements for final exam, you must inform the instructor latest by week 5. Medical proof must be provided.
6. Cell-phones must be turned off or on vibration mode when in class. Students are expected to be respectful to other students and to the instructor. Errant students will be asked to leave the seminar room. You are allowed to use laptops.
7. Students must abide by the university honour codes. Copying solutions from illegal sources (including from senior students) and cheating during quizzes/exam are serious violations of the university honour codes. If caught, the student will be reported to the undergraduate office and given an "F" grade for BF2219 immediately.
8. The instructors DO NOT DISCUSS past year exam questions. Do NOT come to us with this request as the outcome is negative with 100% certainty. The past year exam questions will be incorporated into the lecture and

discussed accordingly. There will be no tutorials as all questions will be discussed real-time in class.

9. The date of the quiz is fixed by the university and CANNOT be changed.

10. The quiz is “Open Book” and 2-hour in duration. Bring along a financial calculator. Importantly, bring yourself.

11. Consultation with instructors is strictly by appointments only.

12. The syllabus is dynamic and subjected to changes. Depending on the progress of the class, the instructor reserves the rights to add/remove topics from the syllabus.

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