UNSW Course Outline

FINS3648 Banking, Finance and Technology - 2024

Published on the 26 Aug 2024

General Course Information

Course Code : FINS3648
Year : 2024
Term : Term 3
Teaching Period : T3
Is a multi-term course? : No
Faculty : UNSW Business School
Academic Unit : School of Banking and Finance
Delivery Mode : Multimodal
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course deals with implications of technological advances on current and future state of financial industry. The intention is to trigger a disruptive and innovative thinking process and to enforce the notion that recent structural changes across the financial industry provide spectrum

of valuable internal and external opportunities. It introduces computational finance and banking technology using the open source programming language of python in the context of finance theory and applications. Case studies to be explored include digital currency (Bitcoin), settlements (Blockchain), hedging, trading and financial advisory.

Course Aims

Technology is a disruptive factor that is transforming the banking and finance industry, it is important that finance graduates are informed of this development and have a basic understanding of the underlying technology so they could contemplate, adapt, innovate and shape an increasingly technology-driven world. This course builds on basic finance theory and capital market courses and complements other finance courses with a unique technology and innovation perspective.

Relationship to Other Courses

Technology is a disruptive factor that is transforming the banking and finance industry, It is important that finance graduates are informed of these development and have a basic understanding of the underlying technology so they could contemplate, adapt, innovate and shape an increasingly technology driven world. This course builds on basic finance theory and capital market courses and complement other finance courses with a unique technology and innovation perspective.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Examine the complexities of the global FinTech landscape and its effect on the process of innovation.	• PLO1 : Business Knowledge • PLO6 : Global and Cultural Competence
CLO2 : Critique the banking and finance ecosystem and the role of consumers in shaping the current environment by linking behavioural finance theories to technological advances in banking.	• PLO1 : Business Knowledge • PLO5 : Responsible Business Practice
CLO3 : Construct technological solutions to real world case studies through the application of disruption methodologies.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO7 : Leadership Development
CLO4 : Communicate a FinTech solution from ideation to implementation to a professional standard	• PLO1 : Business Knowledge • PLO3 : Business Communication
CLO5 : Execute intermediate level Python programming skills in the context of FinTech.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO6 : Collaborate in teams to co-create solutions to real-time problems in the FinTech sector.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO4 : Teamwork

Course Learning Outcomes	Assessment Item
CLO1 : Examine the complexities of the global FinTech landscape and its effect on the process of innovation.	• FinTech Project and Evaluation • Discussion and Reflection
CLO2 : Critique the banking and finance ecosystem and the role of consumers in shaping the current environment by linking behavioural finance theories to technological advances in banking.	• FinTech Project and Evaluation • Discussion and Reflection
CLO3 : Construct technological solutions to real world case studies through the application of disruption methodologies.	• Exercises • FinTech Project and Evaluation
CLO4 : Communicate a FinTech solution from ideation to implementation to a professional standard	• FinTech Project and Evaluation
CLO5 : Execute intermediate level Python programming skills in the context of FinTech.	• Exercises
CLO6 : Collaborate in teams to co-create solutions to real-time problems in the FinTech sector.	• Discussion and Reflection • FinTech Project and Evaluation

Learning and Teaching Technologies

Moodle - Learning Management System | EdStem | Blackboard Collaborate

Learning and Teaching in this course

This is a practical and hands on course. Teamwork is essential. Students undertake a group presentation simulating pitch proposal to open audience. The project requires all stages and steps of the proposal to be fully contemplated, from idea generation to implementation. Each student is expected to take on a role in the team and deliver as a team as well as an individual. The course will draw on concepts, problems and practical implications from textbooks, academic papers, financial press articles as well as relevant financial regulators and government agencies.

The aims of this course are:

- Develop disruptive and innovative thinking process to enforce the notion that technological advances across the industry create spectrum of valuable opportunities
- Develop skills in collaboration and teamwork to be able to adapt and innovate in an increasingly technology driven world

This course is thus designed and developed for students aiming to understand the connections between banking, finance and technology.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Exercises Assessment Format: Individual	30%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO2 : Problem Solving
FinTech Project and Evaluation Assessment Format: Group	40%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork • PLO5 : Responsible Business Practice • PLO7 : Leadership Development
Discussion and Reflection Assessment Format: Individual	30%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO5 : Responsible Business Practice • PLO6 : Global and Cultural Competence

Assessment Details

Exercises

Assessment Overview

The quizzes and iLab Python exercises assess students' understanding of financial technology.

Assesses: PLO1, PLO2

Course Learning Outcomes

- CLO3 : Construct technological solutions to real world case studies through the application of disruption methodologies.
- CLO5 : Execute intermediate level Python programming skills in the context of FinTech.

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date
30%	Python	Week 4 and Week 8

Pything programming quizzes and iLab exercises allowing students to construct technological solutions to real world case study in PropTech through the application of disruption methodologies in a form of base machine learning models. We seek to expose intermediate level Python programming skills in the context of FinTech.

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Assistance with Attribution

This assessment requires you to write/create a first iteration of your submission yourself. You are then permitted to use generative AI tools, software or services to improve your submission in the ways set out below.
Any output of generative AI tools, software or services that is used within your assessment must be attributed with full referencing.
If outputs of generative AI tools, software or services form part of your submission and are not appropriately attributed, your Convenor will determine whether the omission is significant. If so, you may be asked to explain your submission. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

FinTech Project and Evaluation

Assessment Overview

The group project simulates FinTech project proposal for external stakeholders. 30% of the grade is group and 10% is an individual evaluation.

Assesses: PLO1, PLO2, PLO3, PLO4, PLO5, PLO7

BCom students: myBCom course points for PLO7

Course Learning Outcomes

- CLO1 : Examine the complexities of the global FinTech landscape and its effect on the process of innovation.

- CLO2 : Critique the banking and finance ecosystem and the role of consumers in shaping the current environment by linking behavioural finance theories to technological advances in banking.
- CLO3 : Construct technological solutions to real world case studies through the application of disruption methodologies.
- CLO4 : Communicate a FinTech solution from ideation to implementation to a professional standard
- CLO6 : Collaborate in teams to co-create solutions to real-time problems in the FinTech sector.

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date
30%	Group Project	Week 10
10%	Peer Evaluation	Week 10

Teamwork is essential component of current workplace. As a team of finTech specialists you propose solution for one of your companies, prepare pitch presentation for Accelerator/ Incubator or internal Change Management Program. Small groups (5 students) will be formed around Week 2. By default groups are formed following the alphabetical order. Each student is expected to take on a role in the team and deliver as a team as well as an individual. Group presentation is assessed on group component (30%). The team members are responsible to decide on team's governance structure and member's role allocation. Further details on group formation and tips on how to make a good sales pitch presentation will be posted on Moodle. Upon conclusion of this task each team member will complete a peer evaluation exercise worth 10% of the final course mark. You will provide a mark out of 10 for each team member. The combined score will be averaged and moderated by the LiC.

(BCom students: myBCom course points for PLO7)

Assessment Length

No more than 25 pages

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Assistance with Attribution

This assessment requires you to write/create a first iteration of your submission yourself. You are then permitted to use generative AI tools, software or services to improve your submission in the ways set out below.
Any output of generative AI tools, software or services that is used within your assessment must be attributed with full referencing.
If outputs of generative AI tools, software or services form part of your submission and are not appropriately attributed, your Convenor will determine whether the omission is significant. If so, you may be asked to explain your submission. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

Discussion and Reflection

Assessment Overview

This task aims to develop the student's ability to understand multiple perspectives and learn from the insights and experiences of peers in order to transform their thinking of the finance sector.

Assesses: PLO1, PLO3, PLO5, PLO6

BCom students: myBCom course points for PLO3

Course Learning Outcomes

- CLO1 : Examine the complexities of the global FinTech landscape and its effect on the process of innovation.
- CLO2 : Critique the banking and finance ecosystem and the role of consumers in shaping the current environment by linking behavioural finance theories to technological advances in banking.
- CLO6 : Collaborate in teams to co-create solutions to real-time problems in the FinTech sector.

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date
30%	Reflection	Week 7

This task aims to develop your ability to understand multiple perspectives and learn from the insights and experiences of your peers in order to transform your thinking of the finance sector. We will measure this by examining how well you can articulate the extent to which your views about FinTech have developed and changed across the first half of the course. The development of this skill will enable you to see the FinTech landscape in a critically focussed way which will help you to identify problems that need solving which is an important component required in the group task.

(BCom students: myBCom course points for PLO3)

Assessment Length

600 words

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Assistance with Attribution

This assessment requires you to write/create a first iteration of your submission yourself. You are then permitted to use generative AI tools, software or services to improve your submission in the ways set out below.
Any output of generative AI tools, software or services that is used within your assessment must be attributed with full referencing.
If outputs of generative AI tools, software or services form part of your submission and are not appropriately attributed, your Convenor will determine whether the omission is significant. If so, you may be asked to explain your submission. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

General Assessment Information

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To

assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Grading Basis

Standard

Requirements to pass course

In order to pass this course students must:

- Achieve a composite mark of at least 50 out of 100
- Engage actively in course learning activities and attempt all assessment requirements
- Meet any additional requirements specified in the assessment details
- Meet the specified attendance requirements of the course (see Schedule section)

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 0 : 2 September - 8 September	Other	Welcome
Week 1 : 9 September - 15 September	Seminar	Introduction to FinTech
Week 2 : 16 September - 22 September	Seminar	FinTech Innovation & Disruption
Week 3 : 23 September - 29 September	Seminar	FinTech Infrastructure
Week 4 : 30 September - 6 October	Seminar	Current Finance and Banking Ecosystem
Week 5 : 7 October - 13 October	Seminar	Distributed Markets and RegTech
Week 6 : 14 October - 20 October	Other	Flexibility Week - No Lectures or Tutorials - Revision
Week 7 : 21 October - 27 October	Seminar	Behavioural FinTech
Week 8 : 28 October - 3 November	Seminar	Applied ML & AI in Finance
Week 9 : 4 November - 10 November	Seminar	BlockChain and Crypto
Week 10 : 11 November - 17 November	Seminar	Opportunities and Applications

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

Moodle course website

The website for this course is on Moodle. All materials will be posted there and discussion forums will be available for your use.

Lecture Notes and Reading List

Lecture notes and reading materials will be posted and available on Moodle. There is number of readings required for each seminar, the rest consists of optional supporting and supplementary readings.

Course Evaluation and Development

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Juraj Hric					No	Yes

Other Useful Information

Academic Information

COURSE POLICIES AND SUPPORT

The Business School expects that you are familiar with the contents of this course outline and the UNSW and Business School learning expectations, rules, policies and support services as listed below:

- Program Learning Outcomes
- Academic Integrity and Plagiarism
- Student Responsibilities and Conduct
- Special Consideration
- Protocol for Viewing Final Exam Scripts
- Student Learning Support Services

Further information is provided on the Policies and Guidelines page.

Students may not circulate or post online any course materials such as handouts, exams, syllabi or similar resources from their courses without the written permission of their instructor.

STUDENT LEARNING OUTCOMES

The Course Learning Outcomes (CLOs) – under the Outcomes tab – are what you should be able to demonstrate by the end of this course, if you participate fully in learning activities and successfully complete the assessment items.

CLOs also contribute to your achievement of the Program Learning Outcomes (PLOs), which are developed across the duration of a program. PLOs are, in turn, directly linked to UNSW graduate capabilities. More information on Coursework PLOs is available on the Policies and Guidelines page. For PG Research PLOs, including MPDBS, please refer to UNSW HDR learning outcomes.

Academic Honesty and Plagarism

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Code of Conduct with respect to academic integrity, the University may take disciplinary action. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Code of Conduct, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Submission of Assessment Tasks

SHORT EXTENSIONS

Short Extension is a new process that allows you to apply for an extended deadline on your assessment without the need to provide supporting documentation, offering immediate approval during brief, life-disrupting events. Requests are automatically approved once submitted.

Short extensions are ONLY available for some assessments. Check your course outline or

Moodle to see if this is offered for your assessments. Where a short extension exists, all students enrolled in that course in that term are eligible to apply. Further details are available the UNSW Current Students page.

SPECIAL CONSIDERATION

You can apply for special consideration when illness or other circumstances beyond your control interfere with your performance in a specific assessment task or tasks, including online exams. Special consideration is primarily intended to provide you with an extra opportunity to demonstrate the level of performance of which you are capable.

Applications can only be made online and will NOT be accepted by teaching staff. Applications will be assessed centrally by the Case Review Team, who will update the online application with the outcome and add any relevant comments. The change to the status of the application immediately sends an email to the student and to the assessor with the outcome of the application. The majority of applications will be processed within 3-5 working days.

For further information, and to apply, see Special Consideration on the UNSW Current Students page.

LATE SUBMISSION PENALTIES

LATE SUBMISSION PENALTIES

For assessments other than examinations, late submission will incur a penalty of 5% per day or part thereof (including weekends) from the due date and time. An assessment will not be accepted after 5 days (120 hours) of the original deadline unless special consideration has been approved. In the case of an approved Equitable Learning Plan (ELP) provision, special consideration or short extension, the late penalty applies from the date of approved time extension. After five days from the extended deadline, the assessment cannot be submited.

An assessment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the ‘wrong’ assessment has been submitted.

For assessments which account for 10% or less of the overall course grade, and where answers are immediately discussed or debriefed, the LIC may stipulate a different penalty. Details of such late penalties will be available on the course Moodle page.

FEEDBACK ON YOUR ASSESSMENT TASK PERFORMANCE

Feedback on student performance from formative and summative assessment tasks will be provided to students in a timely manner. Assessment tasks completed within the teaching period of a course, other than a final assessment, will be assessed and students provided with feedback, with or without a provisional result, within 10 working days of submission, under normal circumstances. Feedback on continuous assessment tasks (e.g. laboratory and studio-based, workplace-based, weekly quizzes) will be provided prior to the midpoint of the course.

Faculty-specific Information

PROTOCOL FOR VIEWING FINAL EXAM SCRIPTS

UNSW students have the right to view their final exam scripts, subject to a small number of very specific exemptions. The UNSW Business School has set a protocol under which students may view their final exam script. Individual schools within the Faculty may also set up additional local processes for viewing final exam scripts, so it is important that you check with your School.

If you are completing courses from the following schools, please note the additional school-specific information:

- Students in the **School of Accounting, Auditing & Taxation** who wish to view their final examination script should also refer to this page.
- Students in the **School of Banking & Finance** should also refer to this page.
- Students in the **School of Information Systems & Technology Management** should also refer to this page.

COURSE EVALUATION AND DEVELOPMENT

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

QUALITY ASSURANCE

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being

achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential.

TEACHING TIMES AND LOCATIONS

Please note that teaching times and locations are subject to change. Students are strongly advised to refer to the Class Timetable website for the most up-to-date teaching times and locations.