

BUSINESS SCHOOL Te Kura Pakihi

COURSE OUTLINE

FINC 203 Financial Data Analysis

Semester One, 2023

This course outline contains information specific to this paper. For more general information common to your papers, please refer to the COMMERCE_UG_2023: Commerce Undergraduate Students site on Blackboard.

Paper Description and Aims

The main aim of the paper is to provide students with a course in financial and economic data analysis using statistical techniques based on the Microsoft Excel spreadsheet. This paper is designed to prepare students to develop the skills of the students such as critical thinking, information literacy, research and self-motivation of analysing the information by using regression and time series models. This paper focuses on solving a variety of practical problems using computer spreadsheets.

Prerequisite: BSNS 102/BSNS 112

Prerequisite or Co-requisite: FINQ 102/FINC 102
Restriction: ECON 210/STAT 210/STAT 241

Learning Outcomes

Upon successful completion of this paper, you should be able to:

- 1) Understand of the properties of variables from financial markets
- 2) Understand the pragmatic use of statistics in Commerce
- 3) Understand and apply the concept of simple and multiple linear regression in the analysis of cross-sectional datasets collected under various contexts.
- 4) Understand and apply the concept of basic time series regression models.
- 5) Develop fundamental research skills (such as data collection, data processing, and model estimation and interpretation) in applied financial analysis.
- 6) Emphasize techniques used by Financial and Economic Analysts

While the course is recommended for students majoring in Finance and Economics, the methodology is perfectly general and will be useful for any business discipline.

Teaching Staff

Paper Coordinator and Lecturer

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Tutors for computer lab sessions

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You should contact *Dr Tahir* with any administrative enquiries about the paper, e.g., laboratory changes, or requests for late submission of assignments.

Class Representatives

Class representatives are an important means of communication between students and staff. Contact details for your student class representatives can be found on the Blackboard page for this paper.

Course Delivery

Every week, the students must attend one 1 hour 50 minute and two 50-minute lectures.

Lectures present the key conceptual material. Lectures are supported by additional readings and examples. The lectures will bring the important issues to your attention, and add additional information that may not be gleaned from the weekly readings. It is to your benefit that you read the chapters assigned BEFORE attending each lecture. This will enhance your understanding of the subject matter to be covered in the lectures. Lecture times and locations are:

Monday	13:00 - 14:50	BURN ₂
Wednesday	16:00 – 16:50	BURN ₂
Thursday	14:00 - 14:50	TG07

Lecture slides with annotation space will be available on the Blackboard usually one week prior to the lectures so that students can print them and bring to the lecture sessions. Please note that the lecture slides are not substitutes for the lecture.

There are no formal tutorial classes in this paper. Instead, we offer a practical tutorial on every Wednesday during the lecture time, 16:00 - 16:50 every week. This practical tutorial provides you with the opportunity to apply the concepts that you have learned in the class in analysing real-life examples.

Computer Laboratories (Excel)

Computer laboratory sessions are held to practice Excel to apply the concepts learned in lectures. The computer lab streams will be held starting from the second week of teaching.

Day	Time
Monday	10:00 - 10:50
Monday	11:00 - 11:50
Monday	12:00 - 12:50
Monday	15:00 - 15:50
Monday	16:00 – 16:50

Your computer lab stream will be automatically assigned in eVision. Students who wish to change streams may come to the department (OBS 5th floor) between 10 -11am and 2 - 3pm each day for the first 2 weeks of the semester or email Accountancy Finance <u>accountancyfinance@otago.ac.nz</u> to change their tutorial streams.

For additional learning, you may register free online Excel courses (Linkedin, GoSkills etc.) at http://www.otago.ac.nz/its/services/training/online/index.html if you wish to enhance your Excel skills.

Course Calendar (in this outline) details scheduling information. Note that this calendar may change as the course proceeds. Any changes will be announced at lectures and be detailed on Blackboard.

Students are expected to prepare for and attend all classes to gain full benefit from the course. Students who are unable to attend a lecture are expected to catch up on missed material using annotated lecture notes. All aspects of the course are examinable, unless stated otherwise.

Course Learning Resources

Recommended Textbook [RT]

Analysis of Financial Data by Gary Koop, John Wiley & Sons, ISBN: 9780470013212 (2006).

It is highly recommended for you to have the book with you and to read the relevant chapters prior to attending lectures. Please note that the lecture slides may not cover all content taught in the classroom.

Supplementary Reading [SR]

Introductory Econometrics Asia-Pacific Edition, by Jeffery Wooldridge, Mokhtarul Wadud and Jenny Lye, Cengage, ISBN: 9780170350839 (2016).

Blackboard

https://blackboard.otago.ac.nz/ provides you with access to course materials, class notices, and resources. Blackboard is used to email the whole class so it is important that you check your student email and Blackboard regularly.

Further information about student support, learning support and information, academic integrity and other University resources for students is available on the COMMERCE_UG_2021: Commerce Undergraduate Students site on Blackboard.

Student Webmail

We will use your student email account to email you information relevant to your programme. To forward your university email address to an email address that you use regularly take the following steps:

- 1. Log into your StudentMail account (http://www.otago.ac.nz/smlanding/) using your student username and password.
- 2. Click the **Cog** button (top right corner).
- 3. Click on Mail under Your App Settings.
- 4. Under Accounts on left hand side, select Forwarding.
- 5. Under the Forwarding heading, type in the email address you want your email to be forwarded to. You can also choose to have a copy of these emails kept on your StudentMail account, so please check the box if you would like this.
- 6. Click the **Save** button.

Assessment

All material presented is examinable (except where stated otherwise) through internal assessments and the final examination. All assessment information such as due dates and times, content, guidelines etc. will be discussed at lectures and, will be detailed on Blackboard wherever applicable. Students are responsible for ensuring that they are aware of this information, keeping track of their own progress, and catching up on any missed classes.

There are three internal assessments for this course as follows.

1) Assignments: 20% of overall grade

Students will be required to complete two assignments. Each assignment is worth 10% of the overall grade. Specific details regarding the contents and requirements of the assignments will be provided by the Lecturer during semester. No supplementary assignments will be offered and no late submissions will be accepted. If there are problems meeting a due date or if there are any administrative problems, students should contact the paper coordinator. Assignment due dates are indicated in the course colander.

2) Mid-semester test: 30% of overall grade

A closed-book 1 ½ hour mid-semester test will examine all materials (including lectures, handouts, and class discussions covered up to the lecture prior to the date of the exam date.

You are required to bring along a **university approved calculator from List A** in https://www.otago.ac.nz/study/exams/otagoo29434.html#Calculators.

If you are unable to take the test due to situations that are beyond your control, you will need to apply for special consideration and you must present relevant evidence prior to the test. Notifications after the test will not be accepted unless the reason is justifiable (e.g. an illness justified with a medical report). Thus, if you are absent without a prior notification, you will receive a zero score.

3) Final exam: 50% of overall grade

A 2-hour written final exam will be held at the end of the semester. The date, time and venue will be notified as soon as they become available. You are required to bring along a **university approved calculator from List A** in https://www.otago.ac.nz/study/exams/otagoo29434.html#Calculators for the examination. Guidelines for the exam preparation will be provided during the last (review) week.

The assessment for this course will be determined as follows:

Assessment Type	Weight
Two Individual Assignments	20%
Mid-Semester Exam	30%
Final Exam	50%
Total	100%

Grading System

The grading scheme used at Otago is:

A+	90-100	C+	60-62
Α	85-89	C	55-59
A-	80-84	C-	50-54
B+	75-79	D	40-49
В	70-74	E	<40
B-	65-60		

Quality Assurance

Learning Outcomes	Assignment 1	Assignment 2	Mid-Semester Exam	Final Exam
Understanding of the properties of variables from financial markets	✓	✓	✓	✓
Understanding the pragmatic use of statistics in commerce	✓	✓	✓	✓
Understanding and applying the concept of simple and multiple linear regression to the cross-sectional dataset in various contexts	√		√	√
Understanding and applying the concept of basic time series regression models		✓		✓
Develop fundamental research skills (such as data collection, data processing, and model estimation and interpretation) in applied financial analysis	✓	√	✓	✓
Emphasizing techniques used by Financial Analysts	✓	✓	✓	✓
Total	10%	10%	30%	50%

Course Requirements

In order to pass the FINC203 paper you must: (i) pass the **final examination with a minimum of 40%** grade which will be a 2-hour embargoed close-book exam, <u>and</u> (ii) get **an overall mark of at least 50% for the course** (including internal assessments). If you fail the final examination with less than 40%, your overall mark will be returned as *Failed Compulsory Assessment* regardless of your internal assessment marks (i.e., marks for assignments and the mid-term examination).

Course Calendar

Teaching Week	Торіс	Chapter	Computer Lab	Assignment
1	The nature of financial and economic data, concepts of covariance, correlation, and regression.	[RT] 2,3		
2	The simple regression model	[RT] 4	Lab 1 Basic excel tool and descriptive statistics, Basic Regression	Assignment 1 available
3	Statistical aspects of regression (assumptions and inferences).	[RT] 5	Help session for Assignment 1	
4	Multiple regression analysis: estimation and inference	[RT] 6	Lab 2 Multiple Regression	
5	Model specification issues in multiple regression	[RT] 6 [SR] 7	Help session for Assignment	Assignment 1 due
6	Multiple regression analysis with qualitative information	[RT] 7		
7	Introduction to Time Series and autocorrelation	[RT] 9	Lab 3 Multiple Regression with Dummy Variables	
8	Autoregressive model for time series data	[RT] 9		
9	Stationarity and unit root test	[RT] 9	Lab 4 Time series Regression	Assignment 2 available
10	Distributed lag models	[RT] 10	Help session for Assignment 2	
11	Regression with nonstationary time series	[RT] 10	Lab 5 Unit root test	
12	Regression with nonstationary time series.	[RT] 10	Lab 6 Distributed lag models	Assignment 2 due
13	Review			

Lectures end Friday 2 June 2023

Academic Integrity

Academic integrity means being honest in your studying and assessments. It is the basis for ethical decision-making and behaviour in an academic context. Academic integrity is informed by the values of honesty, trust, responsibility, fairness, respect and courage. Students are expected to be aware of, and act in accordance with, the University's Academic Integrity Policy.

Academic Misconduct, such as plagiarism or cheating, is a breach of Academic Integrity and is taken very seriously by the University. Types of misconduct include plagiarism, copying, unauthorised collaboration, submitting work written by someone else (including from a file sharing website, text generation software, or purchased work) taking unau thorised material into a test or exam, impersonation, and assisting someone else's misconduct. A more extensive list of the types of academic misconduct and associated processes and penalties is available in the University's Student Academic Misconduct Procedures.

It is your responsibility to be aware of and use acceptable academic practices when completing your assessments. To access the information in the Academic Integrity Policy and learn more, please visit the University's Academic Integrity website at

www.otago.ac.nz/study/academicintegrityhttp://www.otago.ac.nz/study/academicintegrity, or ask at the Student Learning Centre (HEDC) or the Library, or seek advice from your paper coordinator.

For further information: Academic Integrity Policy

http://www.otago.ac.nz/administration/policies/otago116838.html

Student Academic Misconduct Procedures http://www.otago.ac.nz/administration/policies/otago116850.html

Turnitin on Blackboard

Turnitin is a text-matching software tool which reports matches between sections of student work submitted to it, and other material to which Turnitin has access (i.e. material available via the internet, and content of other student assignments which have previously been submitted to Turnitin). Turnitin is also often referred to as a plagiarism detection tool. All assignments submitted electronically through Blackboard are uploaded via Turnitin, and the report is available to the marker. You are able to check your draft assignment via Turnitin before you submit your final assignment. Full instructions and guidance for the use of Turnitin can be found at: https://help.otago.ac.nz/blackboard/assessing-your-students/turnitin/turnitin-for-students/

Disclaimer

While every effort is made to ensure that the information contained in this document is accurate, it is subject to change. Changes will be notified in class and via Blackboard. Students are encouraged to check Blackboard regularly. It is the student's responsibility to be informed.

Dr Tahir Suleman Dept. of Accountancy & Finance. February-2023