

#### **Course Outline 2017**

# MAORIDEV 733: QUANTITATIVE ANALYSIS: TĀTARITANGA HUHUA (15 POINTS)

**Quarter 1** (1172)

# **Course Prescription**

Quantitative analysis theory, techniques, and tools to support and facilitate governance and managerial decision-making, drawing on examples from mātauranga Māori or traditional Māori knowledge systems, and from Māori enterprise. Includes financial, statistical, and operational modelling.

## **Programme and Course Advice**

Restriction: BUSADMIN 763

### **Goals of the Course**

This course would try to avoid too much technical or mathematical terminologies and principles, but focuses on "making the data meaningful and telling stories from the numbers".

- Provide a firm foundation for the quantitative base of managerial decision-making.
- Stimulate interests and facilitate confidence in using quantitative methods in the daily work.
- Apply quantitative thinking to deeply understand the internal and external issues of organizations.
- Recognise and formulate decision models and methods for quantitative analysis of data in a variety of management scenarios.

# **Learning Outcomes**

By the end of this course it is expected that the student will be able to:

- 1. Demonstrate analytical thinking skills and an understanding of the concepts, tools and practices of modelling and analysing managerial decisions;
- 2. Identify and interpret typical management issues from a quantitative analysis perspective;
- Demonstrate skills necessary for the analysis of small to medium data sets of moderate complexity;

- 4. Extract the important patterns from sets of data, transform them into meaningful information for decision-makings;
- 5. Demonstrate skills in presenting the results of quantitative analysis and collaborative team work.

## **Content Outline**

WK	Date	Topic	Textbook	Comments
			chapters	
1	18 Jan	Introduction to	First things	
		quantitative analysis	first (p.25-35)	_
2	25 Jan	Quantitative analysis and decision making	19	Guest speaker from IMSB on datasets development and application
3	1 Feb	Sources of quantitative data	1, 7	Assignment 1: Team project will be assigned and explained
4	8 Feb	Preliminary concepts for quantitative analysis	4, 6	Research project topic of each team should be finalised at the end of this class
5	15 Feb	Descriptive data analysis	3.1-3.4	Guest speaker from Statistics NZ on application of statistics data in real world.
6	22 Feb	Correlation analysis	3.5, 8	Assignment 2: In class open-book test on descriptive data analysis
7	1 Mar	Regression analysis and prediction	13, 14	Guest speaker to talk about making forecast based on quantitative data analysis
8	8 Mar	Testing differences of groups	9, 10	
9	15 Mar	Presentations of quantitative analysis results	2	Assignment 1 due
10	22 Mar	Team project presentation		Assignment 3: In class open-book test on making-decision based on quantitative data

# **Learning and Teaching**

This course is taught over ten weeks 5:30-8:30pm on Wednesday evening at OGGB, 12 Grafton Road, Auckland.

The use of laptop computers is encouraged during the lectures and also for the in class open-book tests. The preferred software on the laptop is Excel 2007 or 2010. During lectures (but not the tests) you may share laptop computers with other students if you desire.

The average workload for the course is expected to be 2 – 3 hours for every hour of class contact time. To make the class more valuable, you are expected to take proactive attitude in inquiring and responding in the class. We will learn by reading, researching, dialogue, practical exercises, sharing of personal experiences, and lecturing. All lectures will be interactive in nature with elements of group work and a high degree of personal involvement and contributions – "class participation" – will be expected of all enrolled. In addition to attending classes, students need to complete required readings prior to the relevant class and submit and present assignments by the due dates.

## **Teaching Staff**

Lecturer: Dr. James Sun

Department of Management & International Business

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Mobile: 027-536-9027

I am happy to meet you by appointment or engage by phone and/or email.

You are also welcome to contact the GSM Support Staff:

Ngaroimata Reid

Office: 3114, Owen G. Glenn Building Email: ngaroimata.reid@auckland.ac.nz

## **Learning Resources**

The required textbook for this course is:

Levin, D. M., Stephan, D. F., Szabat, K. A. (2016). Statistics for Managers Using Microsoft Excel, Global Edition. Pearson

Reading assignments could be found from Canvas

### Assessment

In-class participation	10%
Assignment 1	60%
Assignment 2	15%
Assignment 3	15%
Total	100%

The broad relationship between these assessments and the course learning outcomes is as follows:

Learning	Participation	Assignment 1	Assignment 2	Assignment 3
1	X	X	X	X
2	X	X		X

3		Х	X	Х
4	X	X	X	X
5	X	X		

## **Note on Assessment and Assignments**

Participation (10%)

• Individual participation in the class will be assessed. The grade will depend on the quality and quantity of your contribution in class discussion and group exercises in the class itself. This contribution will require you to have engaged with the relevant readings and to be fully engaged in class discussions and group exercises. In addition to completing readings for each particular week you are required to reflect on how the content each week relates to Māori management and governance and be ready to contribute your perspective in class. You will not be able to contribute if you don't show up! If you miss a class please let the kaiako (teacher) know by email as a courtesy.

Assignment 1 (60%=report 30% + presentation 20% + personal reflection 10%)

- Working in teams this assignment is an opportunity to contribute to the community. The students of the class will be randomly divided into 6 teams and each team has about 4 members (there will be one team with 5 members because we have totally 25 students in our class).
- Each team will be required to identify a particular management issue related to their own work in education, health, business, and the like, and then turn the management issue into a research topic.
- The research topic could be the evaluation of the current situation or the forecast for the future of this particular management issue. Examples of resear5ch topic could look like: The enrolment rate of Maori students in high school (or universities) in 2020; Implications of the rate of election participation of Maori in Auckland (New Zealand), Relationships of income and life satisfaction of Maori.
- Each team is expected to present its research topic to and have discussions with kaiako (teacher) via email and the topic should be finalised before 8:30pm Wednesday 8 Feb.
- This research project could make use of the datasets provided by Independent Maori Statutory Board which can be found at <a href="www.imsb.maori.nz">www.imsb.maori.nz</a>. Students can also use their own data from other organisations.
- The research project should be completed based on quantitative data analysis by using one or more methods taught in this course.
- The final format of this research project is a report, which contains a cover page, executive summary (up to 1 page), illumination and background of research question (up to 2 pages), data presentation and explanation (figure or table are acceptable) (up to 2 pages), analyses of the data (up to 2 pages), conclusions and recommendations as the results of your analyses (up to 2 pages), and bibliography.
- There should be personal reflections (up to 1 page) of each team member affiliated to the report. The personal reflection should clarify your own role and contribution to this assignment and what you learned in this process. Critically discuss how useful is this assignment in advancing your professional practices.

- The report compiled with the personal reflections should be submitted in both electronic and hard copy to the kaiako (teacher) no later than 8:30pm Wednesday 15 March 2017.
- Each team should present your research project report for a 15-20 minutes for the class on Wednesday 22 March 2017.
- The presentation should be supported by powerpoint slides and in an engaged and interactive way (hopefully all the team members will play a role in the presentation). Electronic version of powerpoint should be handed in after the presentation.
- Your mark for assignment 1 consists of three parts: Report worth 30%;
   Presentation worth 20%; Personal reflection worth 10% (totally 60%).
- Your classmates will grade team presentation based on the criteria below (the
  grade is for the team rather than for individual team members). The grades of
  your classmates for your team will be averaged and equally distributed to the
  members of this team, which will account for 50% of your mark for the
  presentation of this assignment. My own grade will be the other 50% using the
  same criteria for the team presentation.
- The assignment will be explained further in the class of Week 3.

## Grading criteria for team project presentation

#### Team #:

1. Relevance of the topic to Maori community (10 points)	5	
2. Quality of the data used (10 points)		
3. Methods of data analysis (20 points)		
4. Reliability of conclusions (30 points)		
5.Usefulness of recommendations (20 points)		
6.Collaboration of team members (10 points)		

## Assignment 2 (15%)

- This is an in-class open-book test which will last for about 20 minutes.
- Questions include multiple choice, true or false judgement about the concepts or methods lectured in the previous weeks.

#### Assignment 3 (15)

- This is an in-class open-book test which will last for about 30 minutes.
- Questions include multiple choice about the concepts or methods lectured in the
  previous weeks and a short essay (no more than 500 words) to demonstrate your
  mastery of readings and critical thinking skills in using quantitative analysis.

## Note on late assignments:

Arohamai tatou katoa regarding all of our busyness! However, "work pressures" or business or personal travel are not accepted as valid reasons for lateness. The need to submit an assignment late is, however, recognised where there is evidence based on compassionate or medical grounds. Late assignments where medical or compassionate grounds do not apply will receive a grading penalty. There will be plenty of opportunities in class to talk about assignments with me and with each other!

## **Cheating and Plagiarism**

The University of Auckland regards cheating as a serious academic offence.

Plagiarism is a form of cheating. In coursework assignments submitted for marking, plagiarism can occur if you use the work and ideas of others without explicit acknowledgment. Work can be plagiarised from many sources, including books, journal articles, the internet, and other students' assignments. A student's assessed work may be reviewed against electronic source material using computerised detection mechanisms. Upon reasonable request, students may be required to provide an electronic version of their work for computerised review.

The way of avoiding plagiarism is to reference your work properly. If you are in doubt about how to reference properly, ask someone – your lecturers, tutors and the Student Learning Centre are good places to start. Please refer to the following website for further information about academic referencing: <a href="https://www.cite.auckland.ac.nz/">www.cite.auckland.ac.nz/</a>

The document *Guidelines: Conduct of Coursework* provides further advice on how to avoid plagiarism. It can be found at: www.business.auckland.ac.nz/conductcoursework

The penalties for plagiarism can be severe, including losing some or all of the marks for the assignment. Major offences can be sent to the University's Discipline Committee, where further penalties can be imposed.

While you are encouraged to improve your coursework writing skills and are permitted to seek assistance from third parties you are advised that there are important limits on the amount and type of assistance that can be given to you in completing your assignments, including group work. Third parties include fellow students, reading groups, friends, parents, SLC tutors, and paid-for professional editing services.

There is a set of guidelines which clearly indicates the type of advice and assistance that can be given. If you are seeking the assistance of any third party you are required to give a copy of the guidelines to the person prior to them helping or assisting you.

You are also required to only seek and accept help using a printed version of your work, not an electronic version. You must keep a copy of this printed version and produce it if required.

A copy of the guidelines is available at: <a href="https://www.business.auckland.ac.nz/thirdpartyassistance">www.business.auckland.ac.nz/thirdpartyassistance</a>

#### HELP WITH ACADEMIC REFERENCING

Acknowledgement of sources is an important aspect of academic writing. The University's Referen©ite website <a href="www.cite.auckland.ac.nz">www.cite.auckland.ac.nz</a> provides students with a one-stop online resource for academic referencing needs. Referen©ite explains the essentials of referencing and how to avoid plagiarism. It also includes practical tools to help students reference correctly, use references effectively in writing, and gives fast access to some major reference formats with examples.