



## BUSINESS SCHOOL

Course Outline 2019

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

Quarter 1 (1192)

#### 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.

#### Course advice

Restriction: BUSADMIN 763

#### Goals of the course

This course focuses on “making the data meaningful and telling stories from the numbers”.

- Provide a foundation for understanding the use of quantitative evidence in managerial decision-making.
- Stimulate interest and facilitate confidence in using quantitative methods in daily work.
- Apply quantitative thinking to 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 (LO)

By the end of the course, it is expected that students will be able to:

#	Learning outcome	Graduate profile capability*
LO1	Demonstrate analytical thinking skills and an understanding of the concepts, tools and practices of modelling and analysing managerial decisions.	1. Disciplinary knowledge and practice 2. Critical thinking
LO2	Identify and interpret typical management issues from a quantitative analysis perspective.	1. Disciplinary knowledge and practice 2. Critical thinking

#	Learning outcome	Graduate profile capability*
LO3	Demonstrate skills necessary for the analysis of small to medium sized data sets of moderate complexity.	2. Critical thinking 3. Solution seeking
LO4	Extract the important patterns from sets of data, and transform them into meaningful information for decision-makings.	3. Solution seeking 4b. Communication (Written)
LO5	Demonstrate skills in presenting the results of quantitative analysis and collaborative teamwork.	4a. Communication (Oral) 4c. Engagement (Collaboration)

\* See the graduate profile this course belongs to at the end of this course outline.

## Content outline

Week / Module	Topic	Relevant learning resources/activities	Assessment due this period
Week 1/9 Jan	Introduction to quantitative analysis	First things first (p.25-35) Case demonstrations will be distributed and presented in class	Students will be asked to introduce himself/herself in class with indication of expectations for this course
Week 2/16 Jan	Quantitative analysis and decision making	Chapter 19	1.Participation in class 2. Team project will be assigned and explained
Week 3/23 Jan	Sources of quantitative data	Chapter 1 and Chapter 7	Tutorial before class (30minutes)
Week 4/30 Jan	Preliminary concepts for quantitative analysis	Chapter 4 and Chapter 6	Team project topic of each team should be finalised at the end of this class
Week 5/4 Feb	Descriptive data analysis	Chapter 3 (3.1-3.4)	1.Tutorial session before class (30 minutes) 2. Participation and discussion

Week / Module	Topic	Relevant learning resources/activities	Assessment due this period
Week 6/13 Feb	Correlation analysis	Chapter 3 (3.5) and Chapter 8	Tutorial session before class (30 minutes)  Test 1: In class open-book test on descriptive data analysis (please take your own laptop)
Week 7/20 Feb	Regression analysis and prediction	Chapter 13 and Chapter 14	Participation
Week 8/27 Feb	Testing differences of groups	Chapter 9 and Chapter 10	Tutorial session before class (30 minutes)
Week 9/6 March	Presentations and reports of quantitative analysis results	Chapter 2	Test 2: In class open-book test on regression and correlation (please take your own laptop)
Week 10/13 March	Team project presentation		Peer rating and instructor's rating of team presentations

### Learning and teaching

This course is taught over ten weeks 5:30pm-9:00pm on Wednesdays.

The use of laptop computers is encouraged during the lectures and required for the two 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 with elements of group work and a high degree of 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  
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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:

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## Learning resources

The optional 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 (will be used for class discussion but not be counted in final mark) could be found from Canvas

## Assessment information

Assessment task	Weight %	Group and/or individual	Submission
Class attendance	10	Individual	
Team project	30	Group	13 March
Test 1	25	Individual	13 February
Test 2	25	Individual	6 March
Discussion participation	10	Individual	

## Pass requirements

Student should get at least 65 in the total mark to pass this course.

## Description of assessment tasks

Assessment task	Learning outcome to be assessed
Class attendance: Students are expected to attend all the sessions of this course. Each student will be allowed for one session absent for free with reporting to instructor one day in advance of the class. One point will be deducted from 10 points for missing one session in any other cases.	1, 2, 4, 5
Team project: see descriptions below	1, 2, 3, 4, 5

Assessment task	Learning outcome to be assessed
Test 1: 10 questions of True/false judgement and 10 questions of multiple choices will be designed for this test covering descriptive data analysis. This is an open book test and will last for 20 minutes	1, 3, 4
Test 2: 10 questions of True/false judgement and 10 questions of multiple choices will be included in this text, covering correlation and regression analysis. This is an open book test and will last for 20 minutes.	1, 3, 4, 5
Discussion participation: Students are expected to proactively ask questions and make comments on either instructor's lecture or case study in class. 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.	1, 2, 3, 4, 5

### Description for Team Project

This team project accounts for 30 points in the total mark of this course.

- Working in teams this assignment is an opportunity to contribute to the community. The students of the class will be randomly divided into teams and each team has about 4-5 members.
- 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 research 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 have discussions with kaiako (teacher) via email and the topic should be finalised before 9:00pm Wednesday, 30 January.
- This research project could make use of the datasets provided by Independent Maori Statutory Board which can be found at [www.imsb.maori.nz](http://www.imsb.maori.nz). 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 research report (no more than 2,000 words), 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 (1 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 9:00pm Wednesday, 13 March 2017.
- Each team should present your research project report for a 15-20 minutes for the class on Wednesday, 13 March 2017.
- The presentation should be supported by powerpoint slides and in an engaged and interactive way (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 team project consists of three parts: Report worth 12 (40% of 30); Presentation worth 15 (50% of 30); Personal reflection worth 3 (10% of 30).
- The team project will be explained further in the class of Week 2.

#### Grading criteria for team project presentation

Team #:

1. Relevance of the topic to Maori community (10 points)
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)

#### Inclusive learning

Students are urged to discuss privately any impairment-related requirements face-to-face and/or in written form with the courses convenor/lecturer and/or tutor.

#### Academic integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting his or her learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the worldwide web. A student's assessed work may be reviewed against electronic source material using computerised detection to provide an electronic version of their work for computerised review.

#### Student feedback

The University of Auckland evaluates the quality of teaching and of courses by using the Summative Evaluation Tool, or SET. Summative evaluation is formal, summative evaluation of teaching undertaken according to University policy and is conducted at the end of a semester/quarter through the use of the formal University SET instruments. Summative evaluation is used by teachers to reflect on their teaching practice and is also used by the University for quality assurance of teaching and courses.

## In the event of an unexpected disruption

We undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions, the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies, In the event of a disruption, the University and your course coordinators will make every effort to provide you with up to date information via Canvas and the University website.

## Graduate profile for Postgraduate Diploma in Business

The following six themes represent the capabilities that the Business School seeks to foster in all of its graduates. The development of these capabilities does not come all at once, but rather is expected to build from year to year. Each course is not expected to contribute to all capabilities, but each course will have its own goals and learning outcomes that relate to the overall development of this profile.

Graduate Profile	
1. <b>Disciplinary knowledge and practice</b>	Graduates will be able to demonstrate advanced knowledge of general management theory and apply this effectively in a range of contexts.
2. <b>Critical thinking</b>	Graduates will be able to effectively evaluate and synthesise evidence from multiple sources to develop coherent and evidence-based arguments.
3. <b>Solution seeking</b>	Graduates will be able to frame and analyse complex problems, develop practical solutions, and understand the impact and implications of planned implementation.
4. <b>Communication and engagement</b>	Graduates will be able to work effectively in teams and engage varied audiences by communicating professionally using multiple formats.
5. <b>Independence and integrity</b>	Graduates will be able to engage in independent and ethical decision-making and behaviour, demonstrating self-reflection and self-management in complex and ambiguous situations.
6. <b>Social and environmental responsibility</b>	Graduates will recognise, in relation to their field, the potential significance of the principles underpinning the Treaty of Waitangi and sustainability, and demonstrate capability to shape business practice accordingly where appropriate.