https://courseoutline.auckland.ac.nz/dco/course/INFOSYS/750/1213

Business and Economics

INFOSYS 750 : Research Methods – Quantitative (15 POINTS)

2021 Semester One

Course Prescription

A comprehensive review of the methodological issues in systems research, including detailed coverage of univariate and multivariate data analysis.

Course Overview

Prerequisite: Any Stage II Statistics or equivalent Statistics course (consult the relevant Graduate Adviser in the Faculty of Business and Economics).

This course is an introduction to a particular set of research methods applicable to students intending to pursue research in information systems and/or operations management. The course is one of a two-part sequence on research methodology (the other being INFOSYS 751). Specifically, in this course, we will focus on the application of univariate and multivariate statistical techniques. Statistical package used in this course is R.

Course Requirements

Prerequisite: 15 points from STATS 201-255, or equivalent Restriction: MKTG 703, 704

Capabilities Developed in this Course

Capability 1: Disciplinary Knowledge and Practice
Capability 2: Critical Thinking
Capability 3: Solution Seeking
Capability 4: Communication and Engagement
Capability 5: Independence and Integrity
Capability 6: Social and Environmental Responsibilities

Graduate Profile: Bachelor of Commerce (Honours)

Learning Outcomes

By the end of this course, students will be able to:

1. Formulate a problem and conceptualize a solution strategy rooted in multivariate statistical analysis (Capability 1, 4.3 and 5.1)
2. Be able to select and conduct an appropriate set of statistical tests to apply in a given situation. (Capability 1, 2 and 6)
3. Be able to read the research literature and understand the use of statistical methods as applied to management research (Capability 1, 2 and 3)
4. Develop a reasonable level of competence in the use of statistical software (Capability 1, 4.2 and 4.3)

Assessments

Assessment Type	Percentage	Classification
Assignment 1	10%	Individual Coursework
Assignment 2	15%	Individual Coursework
Class Participation	10%	Individual Coursework
Test 1	25%	Individual Coursework
Test 2	15%	Individual Coursework
Project	25%	Group & Individual Coursework
6 types	100%	

Assessment Type	Learning Outcome Addressed			
	1	2	3	4
Assignment 1	✔	✔	✔	✔
Assignment 2	✔	✔	✔	✔
Class Participation	✔	✔	✔	✔
Test 1	✔	✔	✔	✔
Test 2	✔	✔	✔	✔
Project	✔	✔	✔	✔

Workload Expectations

This is a standard 15 points course and students are expected to spend 10 hours per week.

For this course, you can expect [3] hours of lectures, a [2] hour tutorial, [5] hours of reading work on assignments and/or test preparation.

Delivery Mode

Campus Experience or Online

This course is offered in two delivery modes:

Campus Experience

Attendance is expected at scheduled activities including labs/tutorials to complete/receive credit for components of the course.
Lectures will be available as recordings. Other learning activities including seminars/tutorials/labs will be available as recordings.
The course will include live online events including group discussions/tutorials.
Attendance on campus is required for the tests.
The activities for the course are scheduled as a standard weekly timetable.

Online

Attendance is expected at scheduled online activities including labs/tutorials to complete/receive credit for components of the course.
The course will include live online events including group discussions/tutorials/lectures and these will be recorded.
Attendance on campus is not required for the tests.
Where possible, study material will be available at course commencement/be released progressively throughout the course.
This course runs to the University semester timetable and all the associated completion dates and deadlines will apply.

Learning Resources

The primary resources for the course are:
• Hair, J. F., R. E. Anderson, B. J. Babin, and W. C. Black, Multivariate Data Analysis, Prentice- Hall, New York, 7th edition. This is a recommended text book for this course.
• Singer, Judith D. and John. B. Willet, Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence, Oxford University Press, 1st edition, 2003. This is a recommended text book for this course.
• Journal articles on various topics – specific articles will be indicated during the course.
• Software: The software package that we will use in this course is R. You are required to use this package to do your assignments. The software will be available on the network. There are several excellent online tutorials that will help you get started with using R. You should use those extensively. You should also look for books about using R in the library.
• Tutorials: Tutorials will be scheduled to help you work with the software. You may also consult the tutor for help with the use of the software.
• Books in the University Library that cover topics on univariate and multivariate statistics, may help those who need support in basic statistical hypothesis testing, correlation & regression, analysis of variance and other areas. You should use this facility extensively to refresh your knowledge on this topic.
• Canvas: The primary method, by which you will receive course information, handouts, assignments, etc., will be through the use of the Canvas system.

Student Feedback

At the end of every semester students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback and respond with summaries and actions.

Your feedback helps teachers to improve the course and its delivery for future students.

Class Representatives in each class can take feedback to the department and faculty staff-student consultative committees.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

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 their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the Student Disability Services' website http://disability.auckland.ac.nz

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's aegrotat or compassionate consideration page https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

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. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit Student Charter https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.