School of Information and Physical Sciences

STAT1060: Business Decision Making

Singapore PSB

Trimester 3 - 2023 (Singapore)



UUU

www.newcastle.edu.au CRICOS Provider 00109J

OVERVIEW

Course Description

STAT1060 is an introductory course in qualitative and quantitative methods which underpin effective business decision making. It is taught within a business context having been designed for undergraduate students in the College of Human and Social Futures. The course develops a student's ability to incorporate statistical thinking and to take account of variation in the real world during processes of establishing project initiatives, defining objectives, data collection, data presentation, data analysis, reporting and decision making.

Assumed Knowledge Basic numeracy and literacy.

Contact Hours Singapore PSB

Computer Lab

Face to Face On Campus

2 hour(s) per week(s) for Full Term starting Week 2

Lecture

Face to Face On Campus

2 hour(s) per week(s) for Full Term starting Week 2

Unit Weighting 10

Workload Students are required to spend on average 120-140 hours of

effort (contact and non-contact) including assessments per 10

unit course.



CONTACTS

Course Coordinator

Singapore PSB

Prof Stephan Chalup

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Consultation: By appointment only

Teaching Staff

Other teaching staff will be advised on the course Canvas site.

School Office

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SYLLABUS

Course Content

The process of problem solving and decision making in business including:

- Qualitative techniques for data collection and investigation;
- Research process;
- The concept of variation;
- Quantitative and exploratory data techniques;
- Presenting data;
- Descriptive and Inferential Statistics;
- Data types in quantitative analysis;
- Developing hypotheses;
- Sampling distributions;
- Assessing risk;
- Quantifying and incorporating variation in decision making;
- Confidence intervals;
- Hypothesis testing;
- · Presentation of findings;
- Correlation and regression:
- Time Series.

Course Learning Outcomes

On successful completion of this course, students will be able to:

- 1. Describe and implement a structured approach to problem solving and decision making in business
- 2. Explain why data and the understanding of variation are important in making business decisions
- 3. Explain various qualitative techniques fundamental to the decision making process
- 4. Explain and apply basic statistical concepts and techniques
- 5. Identify and use appropriate data collection and analysis techniques
- 6. Identify flaws in data collection techniques and discuss approaches to reducing error
- 7. Interpret and present data in a form that makes information accessible for decision-makers

Course Materials

Details will be provided on the course Canvas site.



COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Course Assessment Requirements:

- Assessment 4 - Final exam: Minimum Grade / Mark Requirement - Students must obtain a specified minimum grade / mark in this assessment item to pass the course.

SCHEDULE

A schedule will be available on the course Canvas site.

Please note that this course outline and the course in Canvas follow the Newcastle model and refer to 13 weeks or modules of the course. I.e., the recess from 14.10.2023 to 22.10.2023 doesn't count as a week of the course, and week/module 7 of the course starts after the recess on 23.10.2023. Consequently, lecture 6 is in week/module 6 and lecture 7 in week/module 7 of the course. Please be aware of a possible confusion: In the PSB timetable, the recess is counted as week 7 so that week/module 7 of the course becomes week 8 in the PSB timetable. Hence, for clarity let's only refer to weeks/modules of the course.

ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Assignment 1	15 th October (Sunday of week of lecture 6) at 11.59pm SGT	Individual	15%	1, 3, 4, 5, 6, 7
2	Assignment 2	3 rd December, (Sunday of week of lecture 12) at 11.59pm SGT	Individual	15%	1, 4, 5, 6, 7
3	Final exam	Formal Examination period	Individual	50%	1, 2, 3, 4, 5, 6, 7
4	Online Quizzes	Sunday of weeks of Lectures 3, 5, 7, 9, before 11.59pm SGT	Individual	20%	3, 4, 5, 7

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Assignment 1

Assessment Type

Written Assignment

Description

Written Assignment: Research Proposal,

The research proposal requires you to write a report outlining the introduction to the case,

management decision to be made, main research objectives, and sources of data.

Weighting

15% 2000 words

Length Due Date

15th October (Week of lecture 6) at 11.59pm SGT

Submission Method

Online

Assessment Criteria

The report will be marked on the marking criteria that are provided on Canvas.

Return Method

Online

Feedback Provided

Online - within two weeks of submission.



Assessment 2 - Assignment 2

Assessment Type Written Assignment

Description Written Assignment, Statistical Analysis to Support Decision Making,

You have been asked to assist with calculations and preparation of appropriate graphs and

output to support decision making process of various organisations.

You should also ensure that your report is professionally written and presented, ready for

presentation to your client.

Weighting 15%

Due Date 3rd December (Week of lecture 12) at 11.59pm SGT

Submission Method Online

Assessment Criteria Submission instructions and general marking criteria are provided on Canvas.

Return Method Online

Feedback Provided Online - within two weeks of submission.

Assessment 4 - Final exam

Assessment Type Formal Examination

Purpose The exam will test your knowledge of the material covered in the course.

Description The exam will consist of two sections: Multiple-choice questions and short answer style

questions

Weighting 50%

Length 120 minutes

Due Date Formal Examination period

Submission Method Formal Exam

Assessment Criteria Relevance of answer.

Return Method Not Returned

Feedback Provided No Feedback - Students can discuss their examination mark with the Course Coordinator

upon request. Items not returned to students (e.g. final examination scripts) will be made available for review by students, upon request, in a controlled and monitored setting. Students are required to make requests, directly to the relevant course coordinator. Completed examination scripts will be kept for a period of six (6) months only, from the relevant fully graded date. Requests made after the six (6) month period **cannot** be

considered.

Assessment 5 - Online Quizzes

Assessment Type Q

Purpose The quiz will test your knowledge of the material covered in the course.

Description In total there will be four (4) quizzes across the trimester. Each quiz is worth 5%.

Weighting 20% Length 50 Minutes

Due Date Sunday of week of Lectures 3, 5, 7, 9, before 11.59pm SGT

The quiz schedule is as follows:

Part 1 – covers Lectures 1 and 2 – to be completed by the end of week of Lecture

3, Sunday 24.9.2023, 11:59pm SGT.

Part 2- covers Lectures 3 and 4- to be completed by the end of week of Lecture

5, Sunday 8.10.2023, 11:59pm SGT.

Part 3 – covers Lectures 5 and 6 – to be completed by the end of week of Lecture 7

Sunday 29.10.2023, 11:59pm SGT.

Part 4 – covers Lectures 7 and 8 – to be completed by the end of week of Lecture

9, Sunday 12.11.2023, 11:59pm SGT.

PLEASE NOTE: Once you start each quiz you must complete the quiz in one sitting (i.e. you will be unable to save the quiz mid-way through and return later), you have 50 minutes to complete the quiz, questions will be presented one at a time, and you will NOT be able to go back and change an answer once it is submitted. Question order will be randomised, and if you navigate off the quiz page your quiz will be terminated (that is, if you attempt to open another window e.g. Google, your quiz will close). Once this quiz is closed, or your quiz has been forced to close for any of the above reasons; NO allowances will be made for retaking the quiz. The course coordinator is able to see if your quiz has been terminated. Only contact the course coordinator if you have been legitimately disadvantaged in taking



your quiz. You must provide evidence for special consideration. Additionally, you should take your quiz using a reliable computer, with an adequate internet connection. It is recommended that you use a university computer on campus to complete your quiz.

Submission Method Assessment Criteria Return Method Online

Accuracy of answer.

Online

Feedback Provided

Online - at closing of each quiz.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description		
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.		
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.		
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.		
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.		
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.		

^{*}Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule.

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35



Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

- 1. the assessment item is a major assessment item; or
- 2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
- 3. you are requesting a change of placement; or
- 4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

https://policies.newcastle.edu.au/document/view-current.php?id=236

Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/no-room-for/policies-and-procedures that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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