MAST90072 Data and Decision Making

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: 36 hours comprising two 1-hour lectures per week and one 1-hour computer laboratory. Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Previous exposure to statistics through an introductory statistics subject or familiarity with elementary statistics.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	Email: **r.huggins@ms.unimelb.edu.au (mailto:r.huggins@ms.unimelb.edu.au)**
Subject Overview:	The basis for decision making is often the analysis of data. In order for these decisions to be reliable data must be correctly collected and analysed. To control costs data should be efficiently collected and it needs to be properly stored and managed. The interpretation of an analysis requires some knowledge of basic statistical ideas and techniques and the results will often be communicated to a non-specialist audience who will make decisions based on the presentation. Alternatively decisions may be made from the analyses and interpretations of others. This subject examines the whole process of data collection, analysis and decision making.
Learning Outcomes:	Students completing the subject will be familiar with the entire statistical process from experimental design and data collection to presenting a report to a possibly non-specialist audience. In passing they will become familiar with some statistical techniques but this is not the aim of the subject. By being aware of the entire statistical process and the resources required they will be better equipped to manage such projects. Students will also become familiar with a major statistical computing package.
Assessment:	3 written assignments of approximately 500 words each, due early, mid and late semester: 30%Project Report (1500 words), due late semester: 20%2-hour written examination, examination period: 50%
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	At the completion of this subject, students should gain the following generic skills: # problem-solving skills (especially through tutorial exercises and assignments) including engaging with unfamiliar problems and identifying relevant strategies;

	# analytical skills including the ability to construct and express logical arguments and to work in abstract or general terms to increase the clarity and efficiency of the analysis; # the ability to work in a team, through interactions with other students.
Links to further information:	http://graduate.science.unimelb.edu.au/
Related Course(s):	Master of Biotechnology
Related Majors/Minors/ Specialisations:	Environmental Science Environmental Science