MAST90027 The Practice of Statistics

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2012, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus. On-campus
Time Commitment:	Contact Hours: 36 hours comprising two 1-hour lectures per week and one 1-hour practice class per week. Total Time Commitment: 3 contact hours plus 7 hours private study per week.
Prerequisites:	Both of the following, or equivalent.

Subject	Study Period Commencement:	Credit Points:
MAST30025 Linear Statistical Models	Semester 1	12.50
MAST30027 Modern Applied Statistics	Semester 2	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Prof Ian Gordon
Contact:	Assoc Prof Ian Gordon Email: **irg@unimelb.edu.au (mailto:irg@unimelb.edu.au)**
Subject Overview:	This subject builds on methods and techniques learned in theoretical subjects by studying the application of statistics in real contexts. Emphasis is on the skills needed for a practising statistician, including the development of mature statistical thinking, organizing the structure of a statistical problem, the contribution to the design of research from a statistical point of view, measurement issues and data processing. The subject deals with thinking about data in a broad context, and skills required in statistical consulting.
Objectives:	After completing this subject students should: * have developed their skills in the effective communication of statistical material, verbally and in writing; * be aware of the key requirements of working as a practising statistician, and developed their ability to meet these requirements; * have developed their understanding of the needs and characteristics of users of statistics, and learned about the important issues that arise in interactions between statisticians and their clients.

Assessment:	Up to 75 pages of written assignments (100%: five assignments, two worth 15% each, two worth 25% each and one worth 20% due at approximately equal intervals throughout the semester).
Prescribed Texts:	None
Recommended Texts:	Boen, J.R. and Zahn, D.A. The Human Side of Statistical Consulting.(1982). Derr, J. Statistical Consulting: A Guide to Effective Communication.(2000). Tufte, E. The Visual Display of Quantitative Information.(1983).
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:	In addition to learning specific skills that will assist students in their future careers in science, they will have the opportunity to develop generic skills that will assist them in any future career path. These include: * problem-solving skills: the ability to engage with unfamiliar problems and identify relevant solution strategies; * analytical skills: the ability to construct and express logical arguments and to work in abstract or general terms to increase the clarity and efficiency of analysis; * collaborative skills: the ability to work in a team; * time-management skills: the ability to meet regular deadlines while balancing competing commitments.
Related Course(s):	Master of Operations Research and Management Science Master of Science (Mathematics and Statistics)
Related Majors/Minors/ Specialisations:	Mathematics and Statistics