

## 620-638 Consulting and Applied Statistics

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus. On-campus
<b>Time Commitment:</b>	Contact Hours: 36 hours comprising 2 one-hour lectures per week and 1 one-hour practice class per week. Total Time Commitment: 3 contact hours plus 7 hours private study per week.
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	It is recommended that students have completed third year subjects in statistics (equivalent to 620-371 [2008] Linear Models and 620-372 [2008] Applied Statistical Inference)
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Assoc Prof Ian Gordon
<b>Subject Overview:</b>	This subject is about the application of statistics in real situations. It deals with thinking about data in a broad context; the client consultant relationship; consulting sessions; verbal and written communication skills; organizing the structure of a statistical problem; professional ethics; case studies; teamwork; presentation of results including graphical methods, tables, report writing; project work; supervised consulting; developing models; searching the literature for relevant background material; critical assessment.
<b>Objectives:</b>	After completing this subject students should: <ul style="list-style-type: none"> <li>- gain experience in the practical application of statistics especially in communicating and explaining statistical ideas verbally and in writing;</li> <li>- increase their critical awareness and their statistical thinking and understand basic statistical techniques from a non-statistical perspective;</li> <li>- explore the nature of statistical consulting and its various dimensions including client behaviour.</li> </ul>
<b>Assessment:</b>	Up to 75 pages of written assignments (100%: five assignments worth 20% equally spaced throughout the semester)
<b>Prescribed Texts:</b>	TBA
<b>Recommended Texts:</b>	Boen, J.R. and Zahn, D.A. (1982) <i>The Human Side of Statistical Consulting</i> . Lifetime Learning Publications. Derr, J. (2000) <i>Statistical Consulting: A Guide to Effective Communication</i> . Duxbury Press. Cabrera J., McDougall A. (2002) <i>Statistical Consulting</i> . Springer.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	Upon completion of this subject, students should develop the following generic skills: <ul style="list-style-type: none"> <li>- Problem-solving skills including engaging with unfamiliar problems, and identifying relevant strategies;</li> <li>- 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.</li> </ul>

	<ul style="list-style-type: none"><li>- The ability to work in a team, through interactions with fellow students</li><li>- High level oral presentation skills, in the presentation of well-organized, well-structured, lucid and persuasive material.</li><li>- Time management and self management.</li></ul>
<b>Related Majors/Minors/ Specialisations:</b>	R05 RM Master of Science - Mathematics and Statistics