

## EDUC90663 Teaching Statistics and Probability

<b>Credit Points:</b>	12.5
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2016.
<b>Time Commitment:</b>	Contact Hours: 24 Total Time Commitment: 170 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	Good knowledge of mathematics to Year 11 level, and general knowledge of teaching practices in any subject.
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt;         &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
<b>Contact:</b>	This subject is not offered in 2016.
<b>Subject Overview:</b>	<p>This subject covers the statistics needed for teaching year 11 and 12: exploratory data analysis and informal inference. The subject blends content knowledge with pedagogical knowledge. It answers such questions as why statistics are valuable and how to understand what they do and don't tell us. It develops the notion of statistical literacy, the importance of embedding the teaching of statistics within real world contexts. It will consider teaching strategies to develop students' critical thinking and their ability to discuss, display and interpret quantitative data. Emphasis will be placed on exploring teaching strategies that both engage and inform students, equipping them to be informed citizens. The use of statistics software will be integral to this subject. Students will be expected to participate in intensive teaching, completion of weekly exercises to satisfactory standard and regularly contribute to the electronic forum.</p>
<b>Learning Outcomes:</b>	<p>On completion of this subject, participants will be able to:</p> <ul style="list-style-type: none"> <li># Demonstrate an understanding exploratory data analysis, informal inference, and critical analysis of data.</li> <li># Discuss issues involved in engaging students in mathematics and developing a productive disposition</li> <li># Demonstrate awareness of issues involved in teaching students to conduct investigations.</li> <li># Demonstrate competence with graphics calculators and an awareness of the issues involved in the pedagogical use of technology.</li> </ul>
<b>Assessment:</b>	<p>Statistical investigation with commentary on pedagogical issues (3500 words) due end of semester. (70%) Critical analysis of reporting of statistical data and reflection on issues for students. (1500 words) due at mid semester. (30%) This subject has a minimum hurdle requirement of 80% attendance at all tutorials, seminars and workshops.</p>
<b>Prescribed Texts:</b>	<p>Goos, M., Stillman, G., &amp; Vale, C. (2007). Teaching secondary school mathematics: Research and practice for the 21st century. Sydney: Allen &amp; Unwin Further readings will be provided. Special requirement. Handheld calculator or computer software recommended for use in the VCE subject Mathematical Methods.</p>
<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>	<ul style="list-style-type: none"><li># Be skilled communicators who can effectively articulate and justify their mathematics teaching practices;</li><li># Understand the significance of developing their mathematics teaching practice on the basis of research evidence</li><li># Demonstrate mastery of the subject matter for this area of teaching and of general principles of effective teaching and learning in a mathematics context, including with technology</li></ul>