

## 652-215 Genes and Genomes

<b>Credit Points:</b>	12.500
<b>Level:</b>	Undergraduate
<b>Dates &amp; Locations:</b>	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 48 lectures and problem classes (four per week) Total Time Commitment: 120 hours
<b>Prerequisites:</b>	Biology 650-141 and 650-142 (prior to 2004: 600-141 and 600-142).
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<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 active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Associate Professor M Davis & Dr J Golz
<b>Subject Overview:</b>	<p>Upon completion of this subject, students should have:</p> <ul style="list-style-type: none"> <li># an understanding of the molecular basis of gene structure, expression and regulation in prokaryotes and eukaryotes;</li> <li># an understanding of DNA replication, recombination and mutagenesis;</li> <li># an appreciation of the organisation of genomes in a variety of organisms and the nature of molecular evolution; and</li> <li># the skills to solve problems and analyse data using a genetic approach.</li> </ul> <p>The subject provides an introduction to the molecular basis of gene structure and expression in prokaryotes and eukaryotes; the processes of DNA replication, mutation and recombination; the molecular tools of gene isolation and analysis; and molecular evolution.</p>
<b>Assessment:</b>	A written class test held mid-semester (10%); two online tests during the semester (15% in total); a 2-hour written examination in the examination period (75%)
<b>Prescribed Texts:</b>	A J Griffiths et al, Introduction to Genetic Analysis, 9th ed. W H Freeman and Co.
<b>Breadth Options:</b>	<p>This subject is a level 2 or level 3 subject and is not available to new generation degree students as a breadth option in 2008.</p> <p>This subject or an equivalent will be available as breadth in the future.</p> <p>Breadth subjects are currently being developed and these existing subject details can be used as guide to the type of options that might be available.</p> <p>2009 subjects to be offered as breadth will be finalised before re-enrolment for 2009 starts in early October.</p>
<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>Notes:</b>	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject.

	Not available to students enrolled in the BBiomedSc.
<b>Related Course(s):</b>	Graduate Diploma in Biotechnology