

## 652-303 Developmental and Cellular Genetics

<b>Credit Points:</b>	12.50
<b>Level:</b>	3 (Undergraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus. Lectures.
<b>Time Commitment:</b>	Contact Hours: Three 1-hour lectures per week. Total 36 hours. Total Time Commitment: 120 hours total time commitment.
<b>Prerequisites:</b>	<i>Principles of Genetics</i> and <i>Genes and Genomes</i>
<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>	Assoc Prof Alex Andrianopoulos
<b>Subject Overview:</b>	The subject will cover developmental genetics in plants, animals and microorganisms; chromatin structure and its implication for gene regulation and development; neurogenetics; genome plasticity; oncogenetics; immunogenetics; and somatic cell genetics.
<b>Objectives:</b>	Upon completion of the subject, students should have: <ul style="list-style-type: none"> <li># become familiar with the techniques and concepts involved in the genetic investigation as applied to the developmental process and cell biology of various eukaryotic organisms;</li> <li># understood the usefulness of genetic analysis as a means to dissect biological systems; and</li> <li># gained a knowledge and understanding of some current biological problems, and of the application of genetic analysis to these problems.</li> </ul>
<b>Assessment:</b>	Two assignments/problem-solving tasks of up to 1000 words each due during the semester (30%); a 3-hour written examination in the examination period (70%).
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject potentially can be taken as a breadth subject component for the following courses: <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2009/D09">https://handbook.unimelb.edu.au/view/2009/D09</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2009/F04">https://handbook.unimelb.edu.au/view/2009/F04</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2009/A04">https://handbook.unimelb.edu.au/view/2009/A04</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2009/M05">https://handbook.unimelb.edu.au/view/2009/M05</a>)</li> </ul> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</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.
<b>Related Course(s):</b>	Bachelor of Biomedical Science
<b>Related Majors/Minors/ Specialisations:</b>	Biotechnology Cell Biology Genetics Reproduction and Development