

## CEDB30002 Concepts in Cell & Developmental Biology

<b>Credit Points:</b>	12.5																								
<b>Level:</b>	3 (Undergraduate)																								
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.																								
<b>Time Commitment:</b>	Contact Hours: 3 x one hour lectures per week (total contact hours: 36) Total Time Commitment: 170hrs																								
<b>Prerequisites:</b>	<p>BSc: Any ONE of the following 200 level subjects:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CEDB20003 Fundamentals of Cell Biology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GENE20001 Principles of Genetics</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>BCMB20002 Biochemistry and Molecular Biology</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> <tr> <td>ZOOL20006 Comparative Animal Physiology</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>GENE20002 Genes and Genomes</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>BBiomed:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BIOM20001 Molecular and Cellular Biomedicine</td> <td>Semester 1</td> <td>25</td> </tr> </tbody> </table> <p>Pre-2008 degrees: • Consult coordinator</p>	Subject	Study Period Commencement:	Credit Points:	CEDB20003 Fundamentals of Cell Biology	Semester 1	12.50	GENE20001 Principles of Genetics	Semester 1	12.50	BCMB20002 Biochemistry and Molecular Biology	Semester 1, Semester 2	12.50	ZOOL20006 Comparative Animal Physiology	Semester 2	12.50	GENE20002 Genes and Genomes	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	BIOM20001 Molecular and Cellular Biomedicine	Semester 1	25
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<b>Corequisites:</b>	None																								
<b>Recommended Background Knowledge:</b>	None																								
<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>Coordinator:</b>	Assoc Prof Gary Hime, Dr Mary Familiari																								
<b>Contact:</b>	<p>Subject Coordinators Assoc Prof Gary Hime <b><a href="mailto:g.hime@unimelb.edu.au">g.hime@unimelb.edu.au</a> (mailto:g.hime@unimelb.edu.au)</b> Dr Mary Familiari</p>																								

	<p><a href="mailto:m.familar@unimelb.edu.au">m.familar@unimelb.edu.au</a> (<a href="mailto:m.familar@unimelb.edu.au">mailto:m.familar@unimelb.edu.au</a>)</p> <p>Administrator Coordination</p> <p><a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">BiomedSci-AcademicServices@unimelb.edu.au</a> (<a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">mailto:BiomedSci-AcademicServices@unimelb.edu.au</a>)</p>
<b>Subject Overview:</b>	<p>The subject develops a student's knowledge of cell and developmental biology, introduced in second year subjects. The subject is arranged for students to gain an understanding of the approaches used to study cell biology and developmental biology and an appreciation of the major concepts involved in the development of a range of organisms – including microbes, invertebrates, vertebrates and plants. A particular focus is the range of approaches (genetic, cellular, anatomical and physiological) that are used to investigate biological systems and address current biological and biomedical problems, including human development, health and disease. This multi-disciplinary subject is co-taught by staff in the departments of Anatomy &amp; Cell Biology, Botany, Genetics, and Zoology. A feature of this course is the application of this knowledge in pure and applied research and thus will provide a platform for students in many Life Science majors, including Biotechnology and Cell &amp; Developmental Biology majors.</p>
<b>Learning Outcomes:</b>	<p>In completing this subject, students should:</p> <ul style="list-style-type: none"> <li># Gain knowledge and understanding of current concepts in cell and developmental biology.</li> <li># Familiarity with the genetic, molecular and cellular techniques used to investigate developmental and cell biology processes in various organisms.</li> <li># Gain an appreciation of how research in cell and developmental biology impacts on society.</li> </ul>
<b>Assessment:</b>	<p>Three 40 minute multiple choice tests (10% each) in early, mid and late semester; One written report (1200 words; 10%) due towards the end of semester; Final 2 hour written examination (60%) in end of semester exam period.</p>
<b>Prescribed Texts:</b>	<p>None</p>
<b>Recommended Texts:</b>	<ul style="list-style-type: none"> <li>• B Alberts, A Johnson, J Lewis, M Raff, K Roberts &amp; P Walter, Molecular Biology of the Cell, Latest edition, Garland Science.</li> <li>• Wolpert L. Principles of Development, Latest edition, Oxford University Press.</li> </ul>
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-ARTS">https://handbook.unimelb.edu.au/view/2016/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-COM">https://handbook.unimelb.edu.au/view/2016/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-ENVS">https://handbook.unimelb.edu.au/view/2016/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-MUS">https://handbook.unimelb.edu.au/view/2016/B-MUS</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>	<p>Subject EFTSL, Level, Discipline &amp; Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a></p>
<b>Generic Skills:</b>	<p>In completing this subject, students should have:</p> <ul style="list-style-type: none"> <li># Ability to interpret scientific literature.</li> <li># Capacity to integrate knowledge across several disciplines.</li> <li># Appreciated the usefulness of basic research for understanding and solving current biological problems.</li> <li># Ability to critically analyse scientific data.</li> </ul>
<b>Notes:</b>	<p>This subject is available to students enrolled in the New Generation B.Sc, B.Biomedicine; pre-2008 BSc, BASc, BBioMed Sc.</p>
<b>Related Course(s):</b>	<p>Master of Biotechnology</p>

<b>Related Majors/Minors/ Specialisations:</b>	<p>Animal Cell Biology (specialisation of Cell and Developmental Biology major)</p> <p>Biotechnology (pre-2008 Bachelor of Science)</p> <p>Botany (pre-2008 Bachelor of Science)</p> <p>Cell Biology (pre-2008 Bachelor of Science)</p> <p>Genetics</p> <p>Genetics</p> <p>Genetics</p> <p>Genetics</p> <p>Genetics</p> <p>Immunology</p> <p>Molecular Biotechnology (specialisation of Biotechnology major)</p> <p>Plant Cell Biology and Development (specialisation of Cell and Developmental Biology major)</p> <p>Reproduction and Development (specialisation of Cell and Developmental Biology major)</p> <p>Science-credited subjects - new generation B-SCI and B-ENG.</p> <p>Selective subjects for B-BMED</p>
<b>Related Breadth Track(s):</b>	Cell and Developmental Biology