

CEDB30003 Developmental Biology

Credit Points:	12.50																														
Level:	3 (Undergraduate)																														
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.																														
Time Commitment:	Contact Hours: 42 contact hours in total including 24 lectures (2 lectures/week) and 3 hours of practicals fortnightly Total Time Commitment: 120 hours																														
Prerequisites:	<p>EITHER</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CEDB30002 Concepts in Cell & Developmental Biology</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>OR any two of the following 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>GENE20002 Genes and Genomes</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>BCMB20002 Biochemistry and Molecular Biology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>ZOOL20006 Comparative Animal Physiology</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>OR (For BBiomedicine students)</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>	Subject	Study Period Commencement:	Credit Points:	CEDB30002 Concepts in Cell & Developmental Biology	Semester 1	12.50	Subject	Study Period Commencement:	Credit Points:	CEDB20003 Fundamentals of Cell Biology	Semester 1	12.50	GENE20001 Principles of Genetics	Semester 1	12.50	GENE20002 Genes and Genomes	Semester 2	12.50	BCMB20002 Biochemistry and Molecular Biology	Semester 1	12.50	ZOOL20006 Comparative Animal Physiology	Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	BIOM20001 Molecular and Cellular Biomedicine	Semester 1	25
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Corequisites:	None																														
Recommended Background Knowledge:	None																														
Non Allowed Subjects:	None																														
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/																														
Coordinator:	Dr Gary Hime, Dr Mary Familiari																														
Contact:	Dr Gary Hime g.hime@unimelb.edu.au (mailto:g.hime@unimelb.edu.au) Dr Mary Familiari																														

	<p>m.familiari@unimelb.edu.au (mailto:m.familiari@unimelb.edu.au)</p> <p>Administrative Coordinator: Ms Kim Williams anatomy-student@unimelb.edu.au 8344 5791</p>
Subject Overview:	In this subject students will gain a detailed understanding of the molecular, biochemical and cellular events that regulate the development of specialised cells, tissues and organs during embryonic development. In particular, cell signalling pathways that regulate embryonic induction, tissue interactions and pattern formation, and expression of regulatory genes. A particular focus is the experimental strategies and techniques that are used to identify molecular and cellular mechanisms of development.
Objectives:	Students will comprehend the molecular, biochemical and cellular events that regulate the development of specialised cells, tissues and organs during embryonic development, particularly cell signalling pathways that regulate embryonic induction, tissue interactions and pattern formation, and expression of regulatory genes; and understand the experimental strategies and techniques that are used to identify the molecular and cellular mechanisms of development.
Assessment:	Ongoing assessment on theory and practical work during the semester comprising: two 30-minute multiple choice quizzes (5% each - mid and late semester); two practical reports to be completed during the practical sessions (5% each - early and mid semester); one practical report of 1200 words (10% - late semester); a 2-hour written examination during the examination period (70%).
Prescribed Texts:	Gilbert SF, Developmental Biology, 8th Edition, Sinauer Press.
Recommended Texts:	Wolpert L. Principles of Development, 4th edition, Oxford University Press.
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2010/B-ARTS) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2010/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2010/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2010/B-MUS) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	<p>On completion of this subject, students should:</p> <ul style="list-style-type: none"> # Be able to interpret scientific literature. # Have the capacity to integrate knowledge across several disciplines. # Appreciate the usefulness of basic research for understanding and solving current biological problems. # Have the ability to critically analyse scientific data.
Notes:	<p>This subject is available to students enrolled in the NG BSc, BBiomed, pre-2008 BSc, pre-2008 BASc, pre-2008 BBiomedSc.</p> <p>Experiments involving the use of animals are an essential part of this subject.</p> <p>A laboratory coat and safety glasses will be required for practical work.</p> <p>(.J..J.//)</p>
Related Course(s):	<p>Bachelor of Biomedical Science Bachelor of Science Graduate Diploma in Biotechnology</p>

Related Majors/Minors/ Specialisations:	Anatomy Animal Cell Biology Biotechnology Biotechnology Cell Biology Cell and Developmental Biology Human Structure and Function Human Structure and Function Molecular Biotechnology Reproduction and Development Reproduction and Development Reproductive Physiology Zoology
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