

Pathology

| Year and Campus: | 2010 | | | | | | | | | | | | | | | | | | | | |
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| Coordinator: | Dr Margaret Ayers Department of Pathology Dr John Underwood Department of Pathology | | | | | | | | | | | | | | | | | | | | |
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| Overview: | A pathology major provides the springboard for students to enter careers or research in areas that require a broad and solid understanding of disease from a molecular, cellular, tissue, functional, biochemical and immunological perspective. Graduates will be prepared for these pathways by developing skills which are crucial to work in both diagnostic and research laboratories, and in consulting roles in the biotechnology and biomedical industries. This major will integrate knowledge from a range of disciplines from human biology to molecular genetics, by enabling students to complete sequences of specialist and integrated subjects which will develop understanding of applications of current molecular and genetic methods to problems in pathological/medical practice. Students will gain experience preparing them for the workplace by participating in lectures series, group based research projects and laboratory based practical sessions. | | | | | | | | | | | | | | | | | | | | |
| Objectives: | <p>Students completing this major should:</p> <ul style="list-style-type: none"> # study factors which influence changes from normal to abnormal structure and function at every level from organism to molecule. # learn to ask fundamental questions about the response of tissues and cells to injury and the outcomes of these responses. # develop a scientific understanding of the nature of disease and its causes, processes, development, and consequences. # study findings emerging from research laboratories which are currently investigating some of the most common and intractable diseases in our community eg. cardiovascular disease, autoimmune disease, neurodegenerative disease and cancer. # experience working in a team on a project which investigates disease. # learn to critically analyse data, both their own and from Scientific Literature. # develop both verbal and written communication skills. | | | | | | | | | | | | | | | | | | | | |
| Structure & Available Subjects: | <p>This major consists of:</p> <ul style="list-style-type: none"> # 50 credit points at the third year level <p>In order to complete this major, students have to complete the prerequisite 521-220 Techniques in Molecular Science (for students having commenced the Bachelor of Biomedicine from 2009 onwards) at the second year level.</p> | | | | | | | | | | | | | | | | | | | | |
| Subject Options: | <p>Second Year: (521-220 Techniques in Molecular Science is a second year pre-requisite for students having commenced the Bachelor of Biomedicine from 2009 onwards)</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BCMB20005 Techniques in Molecular Science</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Third Year:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PATH30001 Mechanisms of Human Disease</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PATH30002 Techniques for Investigation of Disease</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PATH30003 Consequences of Human Disease</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> | | | Subject | Study Period Commencement: | Credit Points: | BCMB20005 Techniques in Molecular Science | Semester 1, Semester 2 | 12.50 | Subject | Study Period Commencement: | Credit Points: | PATH30001 Mechanisms of Human Disease | Semester 1 | 12.50 | PATH30002 Techniques for Investigation of Disease | Semester 1 | 12.50 | PATH30003 Consequences of Human Disease | Semester 2 | 12.50 |
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| BCMB20005 Techniques in Molecular Science | Semester 1, Semester 2 | 12.50 | | | | | | | | | | | | | | | | | | | |
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| PATH30002 Techniques for Investigation of Disease | Semester 1 | 12.50 | | | | | | | | | | | | | | | | | | | |
| PATH30003 Consequences of Human Disease | Semester 2 | 12.50 | | | | | | | | | | | | | | | | | | | |

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| | PATH30004 Advanced Investigation of Human Disease | Semester 2 | 12.50 |
| Links to further information: | http://www.bbiomed.unimelb.edu.au/ | | |
| Related Course(s): | Bachelor of Biomedicine | | |