

## BIOM30002 Biomedicine: Molecule to Malady

| <b>Credit Points:</b>                        | 12.5  |                |                            |                |  |            |    |  |            |    |
|--|---|----------------|----------------------------|----------------|--|------------|----|--|------------|----|
| <b>Level:</b>                                | 3 (Undergraduate)   |                |                            |                |  |            |    |  |            |    |
| <b>Dates &amp; Locations:</b>                | 2016, Parkville<br>This subject commences in the following study period/s:<br>Semester 1, Parkville - Taught on campus.   |                |                            |                |  |            |    |  |            |    |
| <b>Time Commitment:</b>                      | Contact Hours: Three 1-hour lectures per week plus two 1-hour tutorials per semester. Total Time Commitment: 170 hours  |                |                            |                |  |            |    |  |            |    |
| <b>Prerequisites:</b>                        | Prerequisites are both: <table border="1" data-bbox="386 571 1484 775"> <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> <tr> <td>BIOM20002 Human Structure and Function</td> <td>Semester 2</td> <td>25</td> </tr> </tbody> </table>  | Subject        | Study Period Commencement: | Credit Points: | BIOM20001 Molecular and Cellular Biomedicine | Semester 1 | 25 | BIOM20002 Human Structure and Function | Semester 2 | 25 |
| Subject                                      | Study Period Commencement:  | Credit Points: |                            |                |  |            |    |  |            |    |
| BIOM20001 Molecular and Cellular Biomedicine | Semester 1  | 25             |                            |                |  |            |    |  |            |    |
| BIOM20002 Human Structure and Function       | Semester 2  | 25             |                            |                |  |            |    |  |            |    |
| <b>Corequisites:</b>                         | None  |                |                            |                |  |            |    |  |            |    |
| <b>Recommended Background Knowledge:</b>     | Completion of 2nd year of Bachelor of Biomedicine   |                |                            |                |  |            |    |  |            |    |
| <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 Fred Hollande, Mrs Helen Cain, Prof Dick Strugnell   |                |                            |                |  |            |    |  |            |    |
| <b>Contact:</b>                              | Subject Coordinators<br>Mrs Helen Cain<br><a href="mailto:hmcaain@unimelb.edu.au">hmcaain@unimelb.edu.au</a> (mailto:hmcaain@unimelb.edu.au)<br>Prof Dick Strugnell:<br><a href="mailto:rastru@unimelb.edu.au">rastru@unimelb.edu.au</a> (mailto:rastru@unimelb.edu.au)<br>Assoc Prof Fred Hollande<br><a href="mailto:frederic.hollande@unimelb.edu.au">frederic.hollande@unimelb.edu.au</a> (mailto:frederic.hollande@unimelb.edu.au)<br>Administrative Coordinator<br><a href="mailto:BiomedSci-AcademicServices@unimelb.edu.au">BiomedSci-AcademicServices@unimelb.edu.au</a> (mailto:BiomedSci-AcademicServices@unimelb.edu.au)  |                |                            |                |  |            |    |  |            |    |
| <b>Subject Overview:</b>                     | This subject provides students with an insight into how medical problems are approached in the 21st century. Students spend 5-6 hours addressing each of six "maladies", selected to demonstrate the holistic nature of medical practice and the integration of biomedical research into the development of novel diagnostics and evidence-based therapies.   |                |                            |                |  |            |    |  |            |    |

|                           |   |
|---------------------------|---|
|                           | Each module includes elements of normal anatomy and physiology, the epidemiology and the pathology of disease, including any genetic, microbiological, immunological, and inflammatory processes that underpin the pathology. Finally, the public health implications of the malady are considered wherever possible.   |
| <b>Learning Outcomes:</b> | <p>Upon completion of this unit, students should:</p> <ul style="list-style-type: none"> <li># understand that the treatment of complex diseases requires a multidisciplinary and holistic approach;</li> <li># appreciate that for many diseases, an understanding of the biological bases of the disease leads to precise diagnostic and therapeutic opportunities;</li> <li># understand the molecular, cellular and physiological bases of selected diseases;</li> <li># acquire a theoretical framework for the systematic study of complex diseases.</li> </ul> |
| <b>Assessment:</b>        | 2x 45min intra-semester tests (20% each) around weeks 6 and 10; 3 hr written examination in the final examination period (60%).   |
| <b>Prescribed Texts:</b>  | None. It is anticipated that students will access standard reference texts on anatomy, physiology, pathology, biochemistry & molecular biology, microbiology & immunology, pharmacology and clinical medicine. Key references and review articles will be provided via the LMS.   |
| <b>Breadth Options:</b>   | This subject is not available as a breadth subject.   |
| <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>Generic Skills:</b>    | <p>On completion of this subject, students should have developed the following generic skills:</p> <ul style="list-style-type: none"> <li># the ability to interpret scientific literature and interpret data from electronic databases;</li> <li># the capacity to integrate knowledge across disciplines;</li> <li># the ability to comprehend a question, evaluate the relevant information and communicate an answer;</li> <li># an appreciation of the ability to communicate scientific knowledge to an informed lay audience.</li> </ul>                       |
| <b>Notes:</b>             | This subject is only available to students enrolled in the Bachelor of Biomedicine.   |
| <b>Related Course(s):</b> | Bachelor of Biomedicine   |