

## BINF90002 Elements of Bioinformatics

<b>Credit Points:</b>	12.5
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 24 lectures (two per week), 12 one-hour practice classes (one per week) Total Time Commitment: 170 hours.
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Coordinator:</b>	Assoc Prof Andrew Lonie
<b>Contact:</b>	Email: <a href="mailto:alonie@unimelb.edu.au">alonie@unimelb.edu.au</a> ( <a href="mailto:alonie@unimelb.edu.au">mailto:alonie@unimelb.edu.au</a> )
<b>Subject Overview:</b>	Bioinformatics is a key research tool in modern agriculture, medicine, and the life sciences in general. It forms a bridge between complex experimental and clinical data and the elucidation of biological knowledge. This subject presents bioinformatics in the context of its role in science, using examples from a variety of fields to illustrate the history, current status, and future directions of bioinformatics research and practice.
<b>Learning Outcomes:</b>	<ul style="list-style-type: none"> <li># Appreciate the multidisciplinary nature of bioinformatics and its role in modern scientific research and in biological practice.</li> <li># Understand how data from different levels of biology, from genetics to population, can be combined to yield knowledge.</li> <li># Appreciate the ways in which this knowledge can be applied and utilised.</li> </ul>
<b>Assessment:</b>	2000 word essay due mid-semester (20%) Three equally weighted workshop assignments due throughout the semester (15% total) 15 minute group presentation due during the semester (15%) Two hour final exam (50%)
<b>Prescribed Texts:</b>	None
<b>Recommended Texts:</b>	None
<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>	<ul style="list-style-type: none"> <li># The ability to construct and express logical arguments.</li> </ul>

	# The capacity to integrate different types of information to generate a unified understanding which can be communicated clearly either verbally or in writing.
<b>Related Course(s):</b>	Master of Philosophy - Engineering Master of Science (Bioinformatics) Ph.D.- Engineering
<b>Related Majors/Minors/ Specialisations:</b>	Approved Masters level subjects from other departments