

# FOOD30010 Functional Foods

<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 2, Parkville - Taught on campus.						
<b>Time Commitment:</b>	Contact Hours: 36 hours lectures and 12 hours tutorials Total Time Commitment: 170 hours						
<b>Prerequisites:</b>	None						
<b>Corequisites:</b>	None						
<b>Recommended Background Knowledge:</b>	Sciences and other cognate majors. <table border="1" data-bbox="389 658 1485 804"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>FOOD20003 Food Chemistry, Biology and Nutrition</td> <td>Semester 1</td> <td>12.5</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	FOOD20003 Food Chemistry, Biology and Nutrition	Semester 1	12.5
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<b>Non Allowed Subjects:</b>	<table border="1" data-bbox="389 831 1485 976"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>208-226 Food Structure and Function</td> <td>Not offered 2010</td> <td></td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	208-226 Food Structure and Function	Not offered 2010	
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<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>	Dr Ken Ng						
<b>Contact:</b>	Email: <a href="mailto:ngkf@unimelb.edu.au">ngkf@unimelb.edu.au</a> (mailto:ngkf@unimelb.edu.au)						
<b>Subject Overview:</b>	<p>This subject examines the macro structure of food and the chemistry of the components as part of a food matrix. This will include the interactions between emulsifiers and flavours within a food matrix, and interactions between water-proteins, water, lipids, protein-proteins, protein-lipids, protein-carbohydrates, and carbohydrate-lipids.</p> <p>Specialised topics will provide students with a greater understanding of nutritional and sensory characteristics of foods, particularly where new product development involves novel functionality such as conferring health benefits or new physical traits.</p>						
<b>Learning Outcomes:</b>	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> <li># Recognise the importance of interactions of ingredients in food systems</li> <li># Describe the interaction of water with food components</li> <li># Explain the interactions of emulsifiers with other food components</li> <li># Describe the significance of flavour interactions with food matrix and their effects on perception</li> <li># Describe the role of interactions among food components on microstructure, texture and rheology of food products</li> </ul>						

	<ul style="list-style-type: none"> <li># Display an understanding of the impact of food processing on the interactions between macro-components of food components, the structure of the macro-components and the consequences of these interactions</li> <li># Understand the impact of food processing and development on the nutritional, allergic and sensory characteristics of foods</li> </ul>
<b>Assessment:</b>	A one-hour mid-semester examination worth 25% A 1500 word assignment due approximately Week 11 worth 25% A two-hour end-of-semester examination worth 50%
<b>Prescribed Texts:</b>	None
<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 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>	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 be able to:</p> <ul style="list-style-type: none"> <li># Be able to establish a supporting network of peers, and have developed regular and effective study techniques involving those peers</li> <li># Be able to established effective problem solving techniques involving food product formulation</li> <li># Be prepared for participation in team work and submission of individual assignments</li> <li># Be able to communicate formal arguments about the nutritional value of foods</li> <li># Be able to perform a literature search and present information with appropriate citations</li> </ul>
<b>Related Majors/Minors/Specialisations:</b>	<p>Agri-food Biotechnology (specialisation of Biotechnology major)  Food Science  Science-credited subjects - new generation B-SCI and B-ENG.  Selective subjects for B-BMED</p>