

# FOOD30007 Food Processing & Preservation

<b>Credit Points:</b>	12.50									
<b>Level:</b>	3 (Undergraduate)									
<b>Dates &amp; Locations:</b>	2012, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.									
<b>Time Commitment:</b>	Contact Hours: 60 hours (3 hours of lectures & the equivalent of 2 hours practical and site visit activities per week) Total Time Commitment: 120 hours									
<b>Prerequisites:</b>	The subjects listed below or their equivalent. <table border="1" data-bbox="386 571 1484 779"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>FOOD20006 Food Microbiology and Safety</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>FOOD20003 Food Chemistry, Biology and Nutrition</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	FOOD20006 Food Microbiology and Safety	Semester 2	12.50	FOOD20003 Food Chemistry, Biology and Nutrition	Semester 1	12.50
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FOOD20006 Food Microbiology and Safety	Semester 2	12.50								
FOOD20003 Food Chemistry, Biology and Nutrition	Semester 1	12.50								
<b>Corequisites:</b>	None									
<b>Recommended Background Knowledge:</b>	Science & other cognate studies									
<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>	Dr Stirk Kyle									
<b>Contact:</b>	<b>Melbourne School of Land &amp; Environment Student Centre</b> Ground Floor, Land & Food Resources (building 142) <i>Enquiries</i> Phone: 13 MELB (13 6352) Email: <a href="mailto:13MELB@unimelb.edu.au">13MELB@unimelb.edu.au</a> (mailto:13MELB@unimelb.edu.au) Subject Coordinator: <a href="mailto:wkyle@unimelb.edu.au">wkyle@unimelb.edu.au</a> (mailto:wkyle@unimelb.edu.au)									
<b>Subject Overview:</b>	The aim of this subject is to provide students with an understanding of the science and technology associated with the processing of materials of plant and animal origin into food and food products and their preservation by traditional and modern techniques. An integrated presentation embodying chemical, microbiological, nutritional and engineering aspects will be adopted. Practical exercises, demonstrations and site visits will provide experience in commonly applied technologies. The content includes: <ul style="list-style-type: none"> <li># Basic unit and factory operations;</li> <li># Preservation and processing by: moisture control, application of heat, removal of heat, chemical additives, fermentation and emerging technologies;</li> <li># Science and technology of production of selected products from the following food groups: dairy, meat, fish and poultry, fruit and vegetables, cereals and pulses, beverages, oils and fats, confectionery and specialty foods;</li> <li># Food packaging.</li> </ul>									

<b>Objectives:</b>	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> <li># Demonstrate an understanding of the principles and application of food processing and preservation technologies</li> <li># Describe the technologies used to effect preservation</li> <li># Describe the manufacture of a variety of foods and food products, including formulated and specialty foods as well as those within the main commodity groups</li> <li># Understand the role of fractionation and manipulation of food components to produce new products or ingredients</li> <li># Understand and evaluate the implications of processing and preservation methodologies on the physical, chemical, microbiological and nutritional quality of foods</li> <li># Demonstrate an understanding of the basic unit and factory operations used in food processing</li> <li># Evaluate processing technologies for their appropriate application</li> </ul>
<b>Assessment:</b>	Two 2-hour written examinations (one mid-semester and one final) each worth 40%; Site visit and practical reports submitted during the term equivalent to 2,000 words (20%)
<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/2012/B-ARTS">https://handbook.unimelb.edu.au/view/2012/B-ARTS</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2012/B-ENVS">https://handbook.unimelb.edu.au/view/2012/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2012/B-MUS">https://handbook.unimelb.edu.au/view/2012/B-MUS</a>)</li> </ul> <p>You should visit <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">learn more about breadth subjects (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 have developed the following generic skills:</p> <ul style="list-style-type: none"> <li># Skills in observation, critical analysis and report writing</li> <li># An ability to derive, interpret and evaluate social, technical and economic information from a wide variety of sources</li> <li># A capacity for independent critical thought, rational inquiry and self-directed learning and research</li> <li># An ability to communicate effectively in both written and verbal forms</li> </ul>
<b>Notes:</b>	<p>For the purposes of considering applications for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005) and Students Experiencing Academic Disadvantage Policy, this subject requires all students to actively and safely participate in practical exercises conducted in pilot-scale food processing facilities as well as visits to commercial food processing facilities. Such activities may involve lifting, climbing multiple stairs and movement around equipment and compliance with the various organisations' OH&amp;S requirements. Students who feel disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.</p>
<b>Related Majors/Minors/Specialisations:</b>	Food Science Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.