

FOOD30009 Food Research & Development

| Credit Points: | 12.50 | | | | | | | | | | | | | | |
|---|---|----------------|--|---------|----------------------------|----------------|---|------------------|-------|--|------------|-------|----------------------------------|------------|-------|
| Level: | 3 (Undergraduate) | | | | | | | | | | | | | | |
| Dates & Locations: | This subject is not offered in 2014. | | | | | | | | | | | | | | |
| Time Commitment: | Contact Hours: 36 hours (1 hour of lectures per week and equivalent of 3 hours of laboratory or industry based activities during weeks 4-11). Total Time Commitment: Not available | | | | | | | | | | | | | | |
| Prerequisites: | The following subjects, or equivalent. | | | | | | | | | | | | | | |
| | <table border="1"> <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>12.50</td> </tr> <tr> <td>FOOD20006 Food Microbiology and Safety</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>FOOD30008 Advanced Food Analysis</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> | | | Subject | Study Period Commencement: | Credit Points: | FOOD20003 Food Chemistry, Biology and Nutrition | Semester 1 | 12.50 | FOOD20006 Food Microbiology and Safety | Semester 2 | 12.50 | FOOD30008 Advanced Food Analysis | Semester 1 | 12.50 |
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| FOOD20003 Food Chemistry, Biology and Nutrition | Semester 1 | 12.50 | | | | | | | | | | | | | |
| FOOD20006 Food Microbiology and Safety | Semester 2 | 12.50 | | | | | | | | | | | | | |
| FOOD30008 Advanced Food Analysis | Semester 1 | 12.50 | | | | | | | | | | | | | |
| Corequisites: | None | | | | | | | | | | | | | | |
| Recommended Background Knowledge: | Completed 2nd year of food science major. | | | | | | | | | | | | | | |
| Non Allowed Subjects: | Formerly offered as 208343. Students who have completed 208343 (Food science project) are not eligible to enrol in this subject. | | | | | | | | | | | | | | |
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| 208-343 Food Science Project | Not offered 2010 | | | | | | | | | | | | | | |
| Core Participation Requirements: | 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: http://www.services.unimelb.edu.au/disability/ | | | | | | | | | | | | | | |
| Contact: | <p>Melbourne School of Land & Environment Student Centre Ground Floor, Land & Food Resources (building 142)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)</p> | | | | | | | | | | | | | | |
| Subject Overview: | <p>The aim of this subject is to provide students with an understanding of the systematic processes involved in the development of new food products through knowledge of market research, product design and evaluation, packaging, safety, quality and regulatory requirements.</p> <p>This subject represents a capstone experience for food science major, and will allow students to conduct basic research projects in the laboratory or in the industry (minimum 6 weeks equivalent).</p> <p>The content includes:</p> <ul style="list-style-type: none"> # market research and understanding consumer needs; # product lifecycles and research case studies; # idea generation and evaluation; # product and process development - project planning; # formulation development and evaluation; | | | | | | | | | | | | | | |

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| | <ul style="list-style-type: none"> # process development; # shelf-life testing; consumer testing; # market trial and strategy development; # product specification - raw materials, process, finished product; and # product evaluation, environmental impact and regulatory issues; packaging and labelling. |
| Learning Outcomes: | <p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # Demonstrate an understanding of the systematic processes involved in new food product development. # Describe the role of the consumer, industry trends and product lifecycles in new product development. # Discuss the role of ideas generation and evaluation in the product development process. # Write a brief research proposal. # Prepare a flow chart for a research project. # Describe the product development process. # Be able to explain the design issues relevant a new product specification. |
| Assessment: | One hour mid-term exam (35%). One written report equivalent to 2000 words (40%). A 10-min oral presentation (25%). |
| Prescribed Texts: | None |
| Breadth Options: | <p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2014/B-ARTS) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2014/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/B-MUS) <p>You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p> |
| Fees Information: | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| Generic Skills: | <p>On completion of this subject students should have developed the following generic skills:</p> <ul style="list-style-type: none"> # Improve personal contact with the food industry and research institutes. # Use proper methods of scientific report writing and oral presentation. # Understand organisational strategy and project management processes and their application in commercial food operations. # Evaluate technical and process data and communicate this information effectively in scientific written and verbal forms. # Work as team member in a research and/or an industry environment. |
| Notes: | <p>Note: 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&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> |
| Related Majors/Minors/Specialisations: | <p>Food Science Science-credited subjects - new generation B-SCI and B-ENG. Selective subjects for B-BMED</p> |