# FOOD90023 Food Microbiology

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| **Credit Points:** | 12.50 |
| **Level:** | 9 (Graduate/Postgraduate) |
| **Dates & Locations:** | 2010, Parkville<br>This subject commences in the following study period/s:<br>Semester 2, Parkville - Taught on campus. |
| **Time Commitment:** | Contact Hours: 48 hours Total Time Commitment: 120 hours |
| **Prerequisites:** | Eligibility for honours or postgraduate coursework program. |
| **Corequisites:** | None |
| **Recommended Background Knowledge:** | Chemistry and/or biology or equivalent background |
| **Non Allowed Subjects:** | None |
| **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/ |
| **Coordinator:** | Dr Said Ajlouni |
| **Contact:** | Email: **said@unimelb.edu.au (mailto:said@unimelb.edu.au)**<br>Phone: 8344 8620 |
| **Subject Overview:** | The aim of this subject is to provide students with an understanding of Food Microbiology. The content includes:<br># overview of important microorganisms in foods<br># microbial metabolism<br># nature of microbial growth in food<br># action of microorganisms on food components<br># predictive microbiology<br># microorganisms of importance for the food industry<br># microorganisms of potential food safety concern<br># genetically modified microorganisms<br>This subject is supported by a practical laboratory program, which emphasizes modern and instrumental microbiological techniques |
| **Objectives:** | This revised subject is designed to provide students with the fundamental aspects of food microbiology and their practical applications in the food industry.<br>Upon completion, students are expected to be able to:<br># describe the nature of microorganisms, their classification, identification and growth<br># gain practical experiences in microbial identification<br># identify strategies to minimize the risk of food poisoning and to improve consumer confidence in the safety of food<br># understand differences between conventional and rapid methods of microbial analysis |

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| | # apply the principles of predictive microbiology |
| **Assessment:** | Two practical reports (10% each) The 1st report due the week after the mid semester break, and the 2nd during the last week of the semester.One assignment of 1000 words in food microbiology (20%), due mid-way through semester2 hour final written exam (60%) |
| **Prescribed Texts:** | Ray, B. and Bhunia, A., 2008. Fundamental of food microbiology. 4th edition. CRC Press. Taylor & Francis group. Boca Raton, London and New York. |
| **Breadth Options:** | This subject is not available as a breadth subject. |
| **Fees Information:** | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| **Generic Skills:** | Upon completion of this unit, students should have developed:<br># a profound respect for truth, intellectual and professional integrity, and the ethics of scholarship<br># capacity for independent critical thought, rational inquiry and selfdirected learning and research<br># an ability to drive, interpret and analyse social, technical or economic information from multiple sources<br># skills in observation, critical analysis and report writing |
| **Related Course(s):** | Postgraduate Certificate in Food Science<br>Postgraduate Diploma in Food Science |