MIIM20003 Experimental Microbiology

Credit Points: 12.50

Level: 2 (Undergraduate)

Dates & Locations:

2011, Parkville

This subject commences in the following study period/s:
Semester 1, Parkville - Taught on campus.
Semester 2, Parkville - Taught on campus.

Time Commitment: Contact Hours: 12 lectures (one per week) and 36 hours of practical work (three hours per week) (total contact hours: 48) Total Time Commitment: 120 hours

Prerequisites:

Subject	Study Period Commencement:	Credit Points:
BIOL10004 Biology of Cells and Organisms	Semester 1	12.50
BIOL10005 Genetics & The Evolution of Life	Semester 2	12.50

and

Subject	Study Period Commencement:	Credit Points:
MIIM20001 Principles of Microbiology & Immunology	Semester 1	12.50

Note: MIIM20001 Principles of Microbiology & Immunology may also be taken concurrently.

Corequisites: None

Recommended Background Knowledge: None

Non Allowed Subjects:

Subject	Study Period Commencement:	Credit Points:
MIIM20002 Microbes, Infections and Responses	Semester 2	12.50

Core Participation Requirements: It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject requires all students to actively and safely participate in laboratory activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit: http://www.services.unimelb.edu.au/disability/

Coordinator: Dr Karena Waller, Ms Cheryl Power

Contact:

Ms Cheryl Power
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Dr Karena Waller
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Administrative Coordinator:

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Subject Overview: Microbiology is essentially a practical science and an integral part of many aspects of everyday life. This subject illustrates this connection by involving students in a series of experiments that demonstrate the use and application of many basic microbiological techniques. Experiments investigate the culture and microscopic examination of bacteria, viruses and fungi, and explore ways of detecting the presence of bacteria in food and water samples and clinical specimens. Protocols to measure the growth of bacteria as well as procedures to control growth are

	examined. This subject prepares students for more advanced practical subjects by providing basic training in the way in which experiments can be executed, results evaluated and reports compiled.
Objectives:	Upon completion of this course students should have: # acquired knowledge of the basic laboratory methods used in microbiology, when to use them and the ability to perform them safely and effectively; # an understanding of how practical studies augment theoretical studies of the structure, function and activities of microorganisms; # an experience of the laboratory as an interesting and stimulating environment in which to work; # an appreciation of real-life applications of microbiological techniques and their relevance to industry and community health and well-being.
Assessment:	Ongoing assessment of practical reports due during the semester (40%);Ongoing assessment of laboratory notebook during the semester (10%);A 2-hour practical examination during the semester (50%). Satisfactory completion of the laboratory work and written reports, as well as a pass in the practical examination are necessary to pass this subject. Attendance is compulsory. Students who miss more than 20% of the practical component of this subject will not be eligible for final assessment
Prescribed Texts:	Department of Microbiology Techniques Manual (University of Melbourne). Microbiology (Prescott, Harley and Klein's Microbiology), 8th edn, 2010, Willey J, Sherwood L, Woolverton C.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2011/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2011/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2011/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2011/B-MUS)** 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.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Upon completion of this course students should have developed observational, organisational and practical skills in obtaining data and in analysing, reporting, evaluating and interpreting experimental findings.
Notes:	This subject is not available to the Bachelor of Biomedicine students.
Related Course(s):	Bachelor of Science
Related Majors/Minors/ Specialisations:	Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses
Related Breadth Track(s):	Microbiology and immunology