Selected Topics in Microbiology
(779004) 30 Points

Paper overview
Studies microorganisms that cause foodborne diseases and those which are economically relevant to the food industry. Identifies and assesses hazards and risks in food manufacturing.

Programme study options
This paper is available from the Faculty of Health and Environmental Sciences in the following specialisation areas:
• Bachelor of Science (Hons)
• Postgraduate Certificate in Science
• Postgraduate Diploma in Science
• Master of Science

Who can study this paper?
This paper is for scientists who:
• Are enrolled in the above programmes
• Have a background in Microbiology would be preferable

What can you expect to learn?
This paper covers the following topics:
• Critical review of current literature associated with food pathogens and industrial microorganisms.
• Practical components for identification and control of foodborne pathogens.
• Current methods used in the detection of particular foodborne pathogens.
• Critical review of literature relevant to foodborne pathogens and industrial microorganisms.
• Laboratory experiments on the application of microbial products in the food industry.

What you need to study this paper
To study this paper it is essential you have a computer, internet (broadband preferred), email access.

Paper Coordinator: Noemi Gutierrez-Maddox, BSc Philippines, MTech, PhD Massey
Noemi’s recent research interests have been on the application of Bifidobacteria and lactic acid bacteria in novel probiotic foods. She has published papers on ABE (acetone-butanol -fermentation) with Clostridium acetobutylicum. Noemi’s current Aquaculture Biotechnology involvement is the development of probiotic feed for abalone.
www.aut.ac.nz/study-at-aut/study-areas/sciences/our-people/noemi-gutierrez-maddox

Teaching style, dates and location details
Location: On campus at AUT Wellesley Campus, AUT University
Teaching Period(s): Semester 2
Online: No
Block Course: No
Teaching Style: This paper will be offered as a combination of formal lectures, written work, and independent study and supervised laboratory work. Students will undertake an extensive practical programme, where they will identify and quantify the microbiological hazards specific to a food product. Students will be expected to undertake self-directed study including generating information from appropriate texts and journal papers.

How much time will I need to commit to the paper?
This is dependent on your other commitments and the speed at which you learn and work, but on average a 30 point paper typically involves around 300 hours per semester. This includes reading, analysis and discussion of provided literature. This will be done through participation on AUT Online and the preparation of assessments.

How much does this paper cost?
30 point paper tuition fees for domestic students is approximately NZ$2000. Additional fees for study may include; a learner services levy, student association (AUSM) fee, charges and paper activity fees.

Please contact us for further information (International students email international.centre@aut.ac.nz)
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How will this paper be assessed?
• Written assignment
• Conduct a Hazard Analysis and Critical Control Points (HACCP) analysis
• Written scientific report

Enrolment process
New students
Contact the Student Information Centre
Phone: 0800 AUT UNI (0800 288 864) or Email: courseinfo@aut.ac.nz

Returning students
Go online to AUTonline, https://autonline.ac.nz
a. Check paper timetable by clicking on ‘Timetable’ option
b. Then, complete the re-enrolment form by clicking on ‘Forms’ option
c. Then, email us the completed form.

Enrolment and paper information
Student enrolment enquiries:
0800 AUT UNI (0800 288 864)
courseinfo@aut.ac.nz
www.sciencepostgraduate.aut.ac.nz

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