

# PROC 2002 INNOVATIVE FOODS

**Credit Points** 10

**Legacy Code** 301452

**Coordinator** Malik Hussain ([https://directory.westernsydney.edu.au/search/name/Malik Hussain/](https://directory.westernsydney.edu.au/search/name/Malik%20Hussain/))

**Description** This unit introduces students to the principles of food preservation, including heat treatments, chilling, freezing, dehydration, pickles and fermentation. Factors affecting food quality are explored with respect to microbial, chemical and physical changes in food and their effects on food safety, nutritional value and sensory characteristics. The basic principles of good manufacturing practises, sanitation and Hazard Analysis Critical Control Point (HACCP) for control of food safety will be studied in relation to the design of safe food manufacturing processes. The application of the food preservation principles to the processing of food products is covered through hands-on practicals in the pilot plant.

**School** Science

**Discipline** Food Processing Technology

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 2 subject

**Pre-requisite(s)** PROC 1002 OR PROC 1005

**Equivalent Subjects** LGYB 8737 - Food Science Technology Practicum 12 PROC 1004 - Food Science 2 PROC 2001 - Food Science 2

## Assumed Knowledge

Knowledge of first year chemistry and biology; understanding of food composition.

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Describe the factors affecting food quality with respect to microbial, chemical and physical changes and their effects on food safety, nutritional value and sensory quality
2. Explain the principles of sustainable food processing and preservation
3. Identify the development stages critical to developing innovative foods.
4. Articulate the critical control points and prerequisite programs needed to ensure the safety (HACCP plan) for a food process.

## Subject Content

1. Developments in innovative food processing technologies
2. Principles of food preservation including heat treatments, chilling, freezing, dehydration, acid preserves, fermentation, and packaging.
3. Factors affecting food quality and safety, with respect to microbial, chemical, nutritional and physical changes in food during processing.

4. Application of good manufacturing practises (GMPs) and Hazard Analysis Critical Control Point (HACCP) as the basis for design of safe food manufacturing processes.
5. Food safety regulations.

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Quiz	4x 15 minutes	20	N	Individual
Report	2,000 words	20	N	Individual
Case Study	2,000 words	20	N	Individual
Final Exam	2 hours	40	N	Individual

Teaching Periods

## Autumn Hawkesbury Day

**Subject Contact** Malik Hussain ([https://directory.westernsydney.edu.au/search/name/Malik Hussain/](https://directory.westernsydney.edu.au/search/name/Malik%20Hussain/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=PROC2002\\_22-AUT\\_HW\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=PROC2002_22-AUT_HW_D#subjects))