

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 subject 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 food safety assessment will be studied in relation to the development of new food products and 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 fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 2 subject

Pre-requisite(s) PROC 1005 - Introduction to Food Science and Nutrition

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

Restrictions

Successful completion of 60 credit points

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 food innovation to produce new food products.
2. Factors affecting nutrition, quality, shelf life, and safety of the innovative foods during processing.

3. Principles of food preservation including heat treatments, chilling, freezing, dehydration, acid preserves, fermentation, and packaging.
4. Food safety assessment and novel foods regulations.
5. Application of good manufacturing practises (GMPs) and food safety management systems in food manufacturing.

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.

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

Teaching Periods

Autumn (2025)

Hawkesbury

On-site

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/odd/timetable/?subject_code=PROC2002_25-AUT_HW_1#subjects)