

PROC 1007 INTRODUCTION TO FOOD SCIENCE (WSTC)

Credit Points 10

Legacy Code 700334

Coordinator Grant Boyd (<https://directory.westernsydney.edu.au/search/name/Grant Boyd/>)

Description Food provides sustenance to life, nutrition for good health, enjoyment and cultural identity. Students will study the history and cultural significance of food and its traditions in Australia and around the world. This subject introduces the basic principles for understanding the science behind food; its composition, chemical, physical and functional characteristics. Fruits and vegetables, cereal, meat and dairy products will be covered, how they are processed and impacts on food quality and nutrition. Current issues will be discussed, such as world food supply, food-borne disease, diet and health, and new trends in food. Students will need to attend the Hawkesbury Campus for Lectures and Practicals.

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 1 subject

Equivalent Subjects PROC 1002 Food Science 1 PROC 1001 Food Science 1 LGYB 8736 Food Science Technology Practicum 11 PROC 1003 Food Science 1 PROC 1005 Introduction to Food Science

Restrictions Students must be enrolled at The College. Students enrolled in Extended Diploma programs must have passed 40 credit points of preparatory subjects in order to enrol in this subject.

Assumed Knowledge

An understanding and competence with basic chemical principles including SI units, chemical symbols, formulas and equations, nomenclature, stoichiometry, the mole concept, bonding, molecular shape and polarity, states and properties of matter, thermodynamics, equilibria, acids and bases, pH and electrochemistry.

Learning Outcomes

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

1. Explain the history and cultural significance of different foods around the world.
2. Discuss current food and nutrition issues including diet and health, new trends in foods, food quality, safe food handling and food borne disease.
3. Describe the characteristics of food commodities: fruits and vegetables, cereal, dairy and flesh foods, including nutritional value, chemical composition, and functional properties.
4. Describe basic food processing practises associated with fruit, cereal, dairy and flesh commodities.
5. Conduct basic food experiments in the food science laboratory and kitchen safely and competently.
6. Methodically and accurately record data when conducting experiments; and use this data to interpret findings.

7. Demonstrate communication skills, including report writing and oral presentations.

Subject Content

1. Introduction to the study of food science and nutrition; review of current issues related to food including world food supply.
2. History and cultural significance of food
 - a. Historical changes to the food supply ? from the past to today
 - b. Food traditions in different cultures, guest lectures from different cultures.
3. Safe food handling and food borne disease; Food quality assessment
4. Composition of food
5. Food Commodities
 - a. Fruits and vegetables
 - b. Cereal products
 - c. Dairy products
 - d. Flesh products
6. Diet and health
7. Meat, fruit, cereal and dairy processes

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	15 -30 mins each	40	N	Individual	N
Practical	2000 words	40	N	Individual	N
Presentation	5 mins	20	N	Group	N

Teaching Periods

Spring (2025)

Hawkesbury

On-site

Subject Contact Grant Boyd (<https://directory.westernsydney.edu.au/search/name/Grant Boyd/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=PROC1007_25-SPR_HW_1#subjects)