

PROC 3003 FOOD PRODUCT DEVELOPMENT

Credit Points 10

Legacy Code 300915

Coordinator Christine Hutchison ([https://directory.westernsydney.edu.au/search/name/Christine Hutchison/](https://directory.westernsydney.edu.au/search/name/Christine%20Hutchison/))

Description This subject is a final year capstone subject where students work in a team environment to apply the knowledge previously gained through their studies in nutrition and food science to develop a novel food product. The entire process of product development will be covered, including: idea generation; collating market, technical and consumer information; consumer surveying to establish the need/desire for a new product; product innovation development; quality testing and packaging. Students will develop specialised knowledge of the total product development system, including the ability to design, develop formulations and evaluation of sensory properties. Final product assessment includes nutritional composition, microbiological analysis, sensory evaluation and labelling compliant with regulations. The project is run in the simulated industry environment; team work among the members plays a key part of the subject.

School Science

Discipline Food Science and Biotechnology

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 3 subject

Pre-requisite(s) NATS 3038 - Quality Assurance and Food Analysis

Restrictions

Successful completion of 120 credit points

Assumed Knowledge

Students enrolled in this subject must have previous knowledge of food science principles, food processing, human nutrition, food analysis, sensory evaluation and food quality control systems, plus experience in food formulation and ingredient manipulation coupled with an understanding of nutritional requirements.

Learning Outcomes

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

1. Develop specialised knowledge of the total product development system.
2. Develop skills in problem solving, in terms of product formulation and group dynamics, by working effectively, responsibly and safely in a team to coordinate the tasks required.
3. Design, conduct and analyse consumer surveys.
4. Formulate food products, addressing the product design brief and consumer marketing requirements; whilst demonstrating high level food preparation skills and scientific knowledge of the properties of food to create desirable food products.
5. Safely and competently analyse the product (physical, chemical, microbiological and sensory), also ensuring that it complies with food safety and labelling regulations.

6. Report and communicate the results of the development process using a range of modes and formats, including large formatted report and PowerPoint presentation.
7. Investigate and apply statutory regulations in relation to new product development.

Subject Content

- Product development process
- Project aims, objectives and constraints
- idea Generation and Screening
- Consumer survey design and analysis
- Hazard analysis Critical control Point (HACCP) methodology
- Sensory evaluation
- Microbial analysis
- Chemical analysis
- Nutritional Trends in The food industry
- Raw materials sourcing
- Packaging
- legal and labelling
- recommendations

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
Quiz	30 minutes x 5 = 150 minutes	45	N	Individual
Report	5,000 words	45	N	Group
Log/ Workbook	500 words	10	N	Individual

Teaching Periods

Spring (2024)

Hawkesbury

On-site

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=PROC3003_24-SPR_HW_1#subjects)