

NATS 3048 FOOD FORMULATIONS

Credit Points 10

Legacy Code 301453

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

Description This subject applies scientific principles to the development, preparation and presentation of food products. You will be encouraged to become autonomous learners through problem-solving activities and experiential techniques. You will integrate and apply knowledge and skills from areas such as chemistry, biology, food science and nutrition to nutritionally focussed food products. You will also be encouraged to keep abreast of food trends in the dynamic food industry as well as current nutritional issues within domestic, multicultural and indigenous communities. Students will utilise prior knowledge and skills to address specific nutritional issues and the development of new food products to fit within these boundaries.

School Science

Discipline Food Science and Biotechnology

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/) page.

Level Undergraduate Level 3 subject

Equivalent Subjects NATS 3011 - Culinary Science LGYA 6198 - Culinary Studies NATS 3010 - Culinary Science

Restrictions

Successful completion of 120 credit points

Learning Outcomes

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

1. Describe the principle chemical and physical properties of food components and their interactions during food preparation.
2. Explain the role of food ingredients in different food systems and be able to apply relevant food science principles to create new food products.
3. Demonstrate advanced practical skills in the formulation, preparation and presentation of foods and food products
4. Relate nutritional issues with food preparation principles and practices
5. Demonstrate development of skills in food preparation working with a number of food commodities
6. Perform basic recipe manipulation for specific dietary purposes

Subject Content

1. Nutritive and biophysical properties of carbohydrates, proteins and fats
2. Additives to manipulate food composition, processing and storage.
3. Food ingredient manipulation for sustainable product development.
4. Functional foods for specific dietary requirements.
5. Principles for food formulation, within regulatory and health guidelines.

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
Applied Project	2,000 words	40	N	Group
Proposal	2x 1000 words	20	N	Individual
Critical Review	2,000 words	40	N	Individual

Teaching Periods

Autumn (2022)

Hawkesbury

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS3048_22-AUT_HW_D#subjects)

Autumn (2023)

Hawkesbury

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS3048_23-AUT_HW_1#subjects)