SAMPLE COURSE OUTLINE

FOOD SCIENCE AND TECHNOLOGY
GENERAL YEAR 11

Sample course outline

Food Science and Technology – General Year 11

Unit 1 – Food choices and health and Unit 2 – Food for communities

Semester 1

Week	Key teaching points
1–2	**Preparation practices** • workplace regulations for safety and health ▪ protective clothing and footwear ▪ personal hygiene ▪ emergency procedures • safe food handling practices ▪ safe storage of raw and processed foods ▪ prevention of cross contamination ▪ clean equipment • produce food products using raw and processed foods ▪ select and safely use appropriate equipment, such as knives and hot surfaces ▪ demonstrate mise-en-place and precision cutting skills ▪ demonstrate safe food handling practices
3–4	**Investigate raw and processed food** • classification of food ▪ animal ▪ plant ▪ raw ▪ processed • investigate a raw and a processed food product ▪ use ▪ nutrition ▪ cost ▪ shelf life • devise food products using raw and processed foods ▪ cost recipes **Task 1: Test – Preparation practices**
5–6	**Selecting raw and processed food** • sensory properties that influence selection and use of raw and processed food ▪ appearance ▪ texture ▪ aroma ▪ flavour ▪ sound • physical properties that influence selection and use of raw and processed food ▪ size ▪ shape ▪ colour ▪ volume ▪ viscosity

Week	Key teaching points

	• effects of processing techniques on sensory and physical properties of food
	   ▪ change in appearance
	   ▪ change in texture
	   ▪ change in flavour
	• evaluate food products developed from raw and processed foods
	   ▪ sensory properties

7–8	**Celebrate local foods**
	• economic and environmental considerations when purchasing locally produced commodities
	   ▪ food availability
	   ▪ cost
	   ▪ 'food miles'
	   ▪ packaging
	   ▪ waste
	• environmental issues that arise from food and lifestyle choices
	   ▪ food availability
	   ▪ 'food miles'
	   ▪ packaging
	   ▪ recycling and waste
	• devise food products using raw and processed foods
	   ▪ organise food orders and production plans
	• produce food products using raw and processed foods
	   ▪ demonstrate teamwork skills, such as communication and collaboration
	   ▪ present safe, quality, palatable food
	• evaluate food products developed from raw and processed foods
	   ▪ the effectiveness of skills, practices or processes
	   ▪ use relevant terminology
	Task 2: Celebrate local foods

9–10	**Nutritional value of food**
	• food sources and functions of nutrients and water in the body
	   ▪ protein
	   ▪ carbohydrates
	   ▪ vitamins
	   ▪ minerals
	   ▪ lipids
	• importance of a balanced diet and the consumption of a wide variety of foods for health
	• devise food products using raw and processed foods
	   ▪ adapt recipes to suit a purpose

11–12	**Food choices**
	• factors that influence food choices
	   ▪ cost
	   ▪ food availability
	   ▪ family characteristics
	   ▪ peer group
	   ▪ nutritional value
	• use of food selection models and guides to evaluate diets
	   ▪ *Healthy Eating Pyramid (Nutrition Australia May 2015)*
	   ▪ *The Australian Guide to Healthy Eating*
	   ▪ *Australian Dietary Guidelines*
	• devise food products using raw and processed foods
	   ▪ interpret recipes
	Task 3: Food choices

Week	Key teaching points
13–14	**Food for adolescents** • nutritional requirements of adolescents ▪ protein ▪ calcium ▪ iron • devise food products using raw and processed foods ▪ adapt recipes to suit a purpose • produce food products using raw and processed foods ▪ measure ingredients using Australian Standard metric measurement ▪ demonstrate various methods of cooking • Australian food labelling requirements ▪ nutrition information panel ▪ percentage labelling ▪ name and/or description of the food ▪ food recall information ▪ information for allergy sufferers ▪ date marking ▪ ingredients list ▪ country of origin ▪ barcode ▪ weights and measures
15–16	**A food advertisement** • influences on adolescent food choices ▪ use of celebrities, media practices, including music, body image, colour, fonts and graphics, and food styling techniques to market food products ▪ advertising ▪ marketing **Task 4: A food advertisement**

Semester 2

Week	Key teaching points
1	**Staple food commodities** • staple food commodities readily available in Australia • factors that affect the supply of staple food ▪ food availability ▪ cost ▪ climate or seasons ▪ natural disasters • investigate staple food products ▪ use ▪ nutrition ▪ cost ▪ shelf life
2–3	**Selecting staple foods** • primary and secondary processes used to convert raw commodities into safe, quality food products • sensory properties that influence selection and use of staple food ▪ appearance ▪ texture ▪ aroma ▪ flavour ▪ sound • physical properties that influence selection and use of staple food ▪ size ▪ shape ▪ colour ▪ volume ▪ viscosity **Task 5: Staple food commodities**
4–5	**Dry processing techniques** • the effect of processing techniques on the sensory and physical properties of food ▪ dry processing techniques • produce food products using staple foods ▪ measure ingredients using Australian Standard metric measurement ▪ demonstrate safe food handling practices ▪ demonstrate dry processing techniques • evaluate food products developed from staple foods ▪ product's sensory properties **Task 6: The big bake-off**
6–7	**Wet processing techniques** • the effect of processing techniques on the sensory and physical properties of food ▪ wet processing techniques • produce food products using staple foods ▪ select and safely use appropriate equipment ▪ demonstrate mise-en-place and precision cutting skills ▪ demonstrate wet processing techniques • evaluate food products developed from staple foods ▪ effective use of skills, practices or processes
8	**Macronutrients for health** • food sources and role of macronutrients and water for health

Week	Key teaching points
	▪ protein: complete and incomplete ▪ carbohydrates: starches, sugars, and fibre or cellulose ▪ lipids: saturated fats and oils, and unsaturated fats and oils • macronutrient requirements depending on age and lifestyle ▪ protein ▪ carbohydrates ▪ lipids
9–10	**Health issues** • health issues that arise from food choices ▪ malnutrition ▪ underweight ▪ overweight ▪ allergies ▪ intolerances • nutrition-related health conditions and the need for specialised diets ▪ coeliac ▪ lactose intolerance • devise food products using staple foods ▪ adapt recipes to suit a purpose • use of the *Australian Dietary Guidelines* to evaluate food choices **Task 7: Test – Health issues**
11	**Microwave cooking** • the effect of processing techniques on the sensory and physical properties of food ▪ microwave cooking • produce food products using staple foods ▪ demonstrate microwave cooking • evaluate food products developed from staple foods ▪ product's sensory properties
12–13	**A healthy food product** • devise food products using staple foods ▪ cost recipes • produce food products using staple foods ▪ present safe, quality, palatable food • evaluate food products developed from staple foods ▪ use of relevant terminology • labelling requirements for food and beverage products available in Australia ▪ nutrition information panel ▪ percentage labelling ▪ name and/or description of the food ▪ food recall information ▪ information for allergy sufferers ▪ date marking ▪ ingredients list ▪ country of origin ▪ barcode ▪ weights and measures **Task 8: A healthy food product**
14	**Ethical choices** • ethical influences on food choices, such as animal welfare, fair trade, resource use and country of origin

Week	Key teaching points
	• reasons for vegetarian or vegan diets ▪ health ▪ ethical values ▪ cultural ▪ economic cost
15–16	**Food for communities** • workplace regulations for safety and health ▪ protective clothing and footwear ▪ signage for procedures and hazards ▪ safe posture, including lifting, bending and standing ▪ emergency procedures • safe food handling practices ▪ safe storage and thawing of raw and processed foods ▪ prevention of cross contamination ▪ clean equipment and work surfaces • devise food products using staple foods ▪ interpret recipes ▪ organise food orders and production plans • produce food products using staple foods ▪ demonstrate teamwork skills, such as planning and problem solving ▪ present safe, quality, palatable food • evaluate food products developed from staple foods ▪ effective use of skills, practices or processes ▪ use of relevant terminology