

Victorian Certificate of Education

FOOD STUDIES

STUDY DESIGN



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Important information

Accreditation period

Units 1–4: 1 January 2017 – 31 December 2022

Implementation of this study commences in 2017.

Other sources of information

The [VCAA Bulletin](#) is the only official source of changes to regulations and accredited studies. The *Bulletin* also regularly includes advice on VCE studies. It is the responsibility of each VCE teacher to refer to each issue of the *Bulletin*. The *Bulletin* is available as an e-newsletter via free subscription on the VCAA's website at: www.vcaa.vic.edu.au.

To assist teachers in developing courses, the VCAA publishes online the *Advice for teachers*, which includes teaching and learning activities for Units 1–4, and advice on assessment tasks and performance level descriptors for School-assessed Coursework in Units 3 and 4.

The current [VCE and VCAL Administrative Handbook](#) contains essential information on assessment processes and other procedures.

VCE providers

Throughout this study design the term 'school' is intended to include both schools and other VCE providers.

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VCE schools may reproduce parts of this study design for use by teachers. The full VCAA Copyright Policy is available at: www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx.

Introduction

Scope of study

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today's complex architecture of influences and choices.

Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems and the many physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate information, marketing messages and new trends.

Practical work is integral to Food Studies and includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, sensory analysis, product analysis and scientific experiments.

Rationale

Australia has a varied and abundant food supply, and food and cooking have become prominent in digital media and publishing. Globally, many people do not have access to a secure and varied food supply and many Australians, amid a variety of influences, consume food and beverage products that may harm their health. This study examines the background to this abundance and explores reasons for our food choices.

VCE Food Studies is designed to build the capacities of students to make informed food choices. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality.

Aims

This study enables students to:

- develop as informed, discerning and capable food citizens
- build practical food skills in the planning, preparation, evaluation and enjoyment of food, including the principles and practices that ensure the safety of food
- apply principles of nutrition, food science and sensory evaluation to food planning and preparation
- extend understanding of food origins, cultures, customs and behaviours
- understand global and local systems of food production, distribution and governance
- develop awareness of a diverse range of influences on food choice
- research and discuss issues relating to economic, environmental and ethical dimensions of our food system
- analyse and draw evidence-based conclusions in response to food information, food advertising and current food trends.

Structure

The study is made up of four units.

Unit 1: Food origins

Unit 2: Food makers

Unit 3: Food in daily life

Unit 4: Food issues, challenges and futures

Each unit deals with specific content contained in areas of study and is designed to enable students to achieve a set of outcomes for that unit. Each outcome is described in terms of key knowledge and key skills.

A glossary defining terms used across Units 1 to 4 in the *VCE Food Studies Study Design* is included in the companion document *Advice for teachers*.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education. All VCE studies are benchmarked against comparable national and international curriculum.

Duration

Each unit involves at least 50 hours of scheduled classroom instruction over the duration of a semester.

Changes to the Study Design

During its period of accreditation minor changes to the study will be announced in the [VCAA Bulletin](#). The *Bulletin* is the only source of changes to regulations and accredited studies. It is the responsibility of each VCE teacher to monitor changes or advice about VCE studies published in the *Bulletin*.

Monitoring for quality

As part of ongoing monitoring and quality assurance, the VCAA will periodically undertake an audit of VCE Food Studies to ensure the study is being taught and assessed as accredited. The details of the audit procedures and requirements are published annually in the [VCE and VCAL Administrative Handbook](#). Schools will be notified if they are required to submit material to be audited.

Safety and wellbeing

It is the responsibility of the school to ensure that duty of care is exercised in relation to the health, hygiene and safety of all students undertaking the study. This study may involve the handling of potentially hazardous substances and the use of potentially hazardous equipment. Particular care should be taken with regard to students with allergies to foods that may be used in classes. It would be beneficial for Food Studies teachers to have competence in safe food handling, for example through completion of training in a nationally recognised VET unit of competence in workplace hygiene and/or food safety.

Employability skills

This study offers a number of opportunities for students to develop employability skills. The [Advice for teachers](#) companion document provides specific examples of how students can develop employability skills during learning activities and assessment tasks.

Legislative compliance

When collecting and using information, the provisions of privacy and copyright legislation, such as the Victorian *Privacy and Data Protection Act 2014* and *Health Records Act 2001*, and the federal *Privacy Act 1988* and *Copyright Act 1968*, must be met.

Assessment and reporting

Satisfactory completion

The award of satisfactory completion for a unit is based on the teacher's decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Demonstration of achievement of outcomes and satisfactory completion of a unit are determined by evidence gained through the assessment of a range of learning activities and tasks.

Teachers must develop courses that provide appropriate opportunities for students to demonstrate satisfactory achievement of outcomes.

The decision about satisfactory completion of a unit is distinct from the assessment of levels of achievement. Schools will report a student's result for each unit to the VCAA as S (Satisfactory) or N (Not Satisfactory).

Levels of achievement

Units 1 and 2

Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators.

Units 3 and 4

The VCAA specifies the assessment procedures for students undertaking scored assessment in Units 3 and 4. Designated assessment tasks are provided in the details for each unit in VCE study designs.

The student's level of achievement in Units 3 and 4 will be determined by School-assessed Coursework (SACs) and/or School-assessed Tasks (SATs) as specified in the VCE study designs, and external assessment.

The VCAA will report the student's level of achievement on each assessment component as a grade from A+ to E or UG (ungraded). To receive a study score the student must achieve two or more graded assessments and receive S for both Units 3 and 4. The study score is reported on a scale of 0–50; it is a measure of how well the student performed in relation to all others who took the study. Teachers should refer to the current [VCE and VCAL Administrative Handbook](#) for details on graded assessment and calculation of the study score. Percentage contributions to the study score in VCE Food Studies are as follows:

- Unit 3 School-assessed Coursework: 30 per cent
- Unit 4 School-assessed Coursework: 30 per cent
- End-of-year examination: 40 per cent.

Details of the assessment program are described in the sections on Units 3 and 4 in this study design.

Authentication

Work related to the outcomes of each unit will be accepted only if the teacher can attest that, to the best of their knowledge, all unacknowledged work is the student's own. Teachers need to refer to the current [VCE and VCAL Administrative Handbook](#) for authentication procedures.

Unit 1: Food origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into particular food-producing regions of the world.

In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine.

They consider the influence of technology and globalisation on food patterns. Throughout this unit students complete topical and contemporary practical tasks to enhance, demonstrate and share their learning with others.

Area of Study 1

Food around the world

In this area of study students explore the origins and cultural roles of food, from early civilisations through to today's industrialised and global world. Through an overview of the earliest food production regions and systems, students gain an understanding of the natural resources, climatic influences and social circumstances that have led to global variety in food commodities, cuisines and cultures with a focus on one selected region other than Australia. The practical component explores the use of ingredients available today that were used in earlier cultures. It also provides opportunities for students to extend and share their research into the world's earliest food-producing regions, and to demonstrate adaptations of selected food from earlier cuisines.

Outcome 1

On completion of this unit the student should be able to identify and explain major factors in the development of a globalised food supply, and demonstrate adaptations of selected food from earlier cuisines through practical activities.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- the factors influencing the emergence of different food systems, food products and food practices around the world
- the historical development of food systems, food cultures and distinctive cuisines, with a focus on one selected region other than Australia
- the factors that facilitated the early development of agricultural food systems, including those that enabled the cultivation of wild plants and the domestication of animals for farming
- hunter-gatherer food systems and how they differ from and are similar to early agricultural food systems, including the types of foods available, the potential advantages for communities, and the challenges in terms of feeding human populations
- patterns in the global spread of food production and the growth of trade in food commodities such as grains, tea, coffee, chocolate, salt, spices and sugar
- the affect of industrialisation, technology and globalisation on food availability, production and consumption.

Key skills

- explain factors that have influenced the emergence of distinctive food cultures and cuisines throughout the world
- research the development of food production and food customs in one selected region other than Australia, and demonstrate the practical use of ingredients from this region
- compare attributes and challenges of hunter-gatherer and agricultural food systems
- research and explain key historical factors and developments in global food production systems
- identify foods that can be traced back to early cultures and demonstrate contemporary uses and recipes through practical activities
- apply principles of safe and hygienic food handling practices in a range of practical activities
- demonstrate practical skills, including organisational and technical, in relation to the preparation, cooking and presentation of food.

Area of Study 2

Food in Australia

In this area of study students focus on the history and culture of food in Australia. They look at indigenous food prior to European settlement and the attempts of the first non-indigenous settlers to establish a secure and sustainable food supply. Students consider the development of food production, processing and manufacturing industries and conduct a critical inquiry into how Australian food producers and consumers today have been influenced by immigration and other cultural factors. Students conduct research into foods and food preparation techniques introduced by immigrants over time and consider the resurgence in interest in indigenous food practices, while reflecting on whether Australia has developed a distinctive cuisine of its own. The practical component complements the study of ingredients indigenous to Australia and provides students with opportunities to extend and share their research into a selected cuisine brought by migrants.

Outcome 2

On completion of this unit the student should be able to describe patterns of change in Australia's food industries and cultures, and use foods indigenous to Australia and those introduced through migration in the preparation of food products.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- the characteristics of food production and consumption among indigenous Australians prior to European settlement, including the range of foods and flavourings available; tools and technology used; human and natural resources required; and specialist knowledge and practices
- the challenges encountered by the first non-indigenous settlers in striving to establish a secure and sustainable food supply
- the factors influencing the development of food production, processing and manufacturing industries across Australia
- patterns of migration to Australia and the influence of immigrants on Australian food tastes and consumption
- the characteristics of a selected cuisine of influence in Australia, including typical ingredients and meals; flavours and other sensory properties; methods of preparation and serving, including safe handling practices; and associated customs and celebrations
- trends in food practices and food subcultures in contemporary Australia, such as emerging food movements and changing social behaviours relating to food
- key points of debate on whether Australia has its own distinctive cuisine.

Key skills

- identify foods and flavourings indigenous to Australia and demonstrate contemporary culinary uses
- explain influences in the development of Australian food production, processing and manufacturing industries
- identify historical patterns of Australian immigration and discuss effects on the nation's food tastes and behaviours
- describe a cuisine brought by immigrants to Australia and demonstrate typical preparation and serving methods through practical activities
- summarise and analyse current trends in food practices and food subcultures in Australia
- construct a point of view about the development of a distinctive Australian cuisine
- use equipment and techniques appropriately, apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of food in a range of practical activities.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks that provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study, including the key knowledge and key skills listed for the outcomes, should be used for course design and the development of learning activities and assessment tasks. Assessment must be a part of the regular teaching and learning program and should be completed mainly in class and within a limited timeframe.

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

The assessment for Outcome 1 is:

- a range of practical activities, with records that reflect on two of the practical activities that use ingredients found in earlier cultures. Records can include production plans and evaluations of products or analysis of dietary intake.

In addition, at least one task for the assessment of Outcome 1 should be selected from the following:

- a short written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation
- an oral presentation
- a practical demonstration
- a video or podcast.

The assessment for Outcome 2 is:

- a range of practical activities, with records that reflect on two of the practical activities that use ingredients indigenous to Australia and/or ingredients introduced through migration. Records can include production plans and evaluations of products or analysis of dietary intake.

In addition, at least one task for the assessment of Outcome 2 should be selected from the following:

- a short written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation
- an oral presentation
- a practical demonstration
- a video or podcast.

Where teachers allow students to choose between tasks they must ensure that the tasks they set are of comparable scope and demand.

Unit 2: Food makers

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances. They consider the possible extension of their role as small-scale food producers by exploring potential entrepreneurial opportunities.

Area of Study 1

Food industries

In this area of study students focus on commercial food production in Australia, encompassing primary production and food processing and manufacturing, and the retail and food service sectors. Students apply an inquiry approach, with emphasis on the ever-changing and dynamic nature of our food industries and their ongoing importance to Australia's economy. Students investigate the characteristics of the various food industries and identify current and future challenges and opportunities. They consider the influences on food industries, and in turn how they influence people. Students investigate new food product development and innovation, and the processes in place to ensure a safe food supply. Students undertake a practical component, creating new food products using design briefs, and applying commercial principles such as research, design, product testing, production, evaluation and marketing.

Outcome 1

On completion of this unit the student should be able to describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- components of the Australian food system
- overview of current economic trends, issues and influences in Australian food industry sectors including farm and fisheries food production; retail food and beverage sales; and food exports and imports
- key elements of primary production of food in Australia, including the leading agricultural and horticultural industries, and major food-growing regions and products (for local and export markets)
- the characteristics of leading food processing and manufacturing industries in Australia
- the roles of the food service sector and major food retailers in Australia
- the influence of consumer demand on the food supply, including the role of media, activism and consumer rights organisations
- the steps in the process of developing new food products using design briefs: research, design, innovation, product testing, production, evaluation and marketing
- overview of the governance and regulation behind the setting and maintaining of food standards and ensuring a safe food supply

- the structure and purpose of the Food Standards Code, including use of food additives and food labelling regulations
- characteristics and efficacy of food industry safety programs currently in place to reduce the risks of food contamination.

Key skills

- identify major sectors and explain current developments in the Australian food system
- describe Australia's leading industries in primary food production, processing and manufacturing
- analyse opportunities and challenges within the Australian food service and food retailing industries
- analyse the influence of consumers on food industries
- explain and apply the process of developing new food products using design briefs
- explain the reasons for Australia's governance and regulation of food standards and food safety
- discuss food industry programs that prevent and address food contamination risks
- use equipment and techniques appropriately, apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of food in a range of practical activities.

Area of Study 2

Food in the home

In this area of study students further explore food production, focusing on domestic and small-scale food production. Students compare similar products prepared in different settings and evaluate them using a range of measures. They consider the influences on the effective provision and preparation of food in the home. Their practical skills are extended through designing and adapting recipes, encompassing a range of dietary requirements commonly encountered by the food service sector and within families. Students propose and test ideas for applying their food skills to entrepreneurial projects that potentially may move their products from a domestic or small-scale setting to a commercial context.

Outcome 2

On completion of this unit the student should be able to compare and evaluate similar foods prepared in different settings, explain the influences on effective food provision and preparation in the home, and design and create a food product that illustrates potential adaptation in a commercial context.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- the principles and practices for the sensory evaluation of food products
- sensory, physiological, economic and social considerations in the comparison of particular meals and dishes prepared in commercial and domestic or small-scale settings
- influences on effective planning, management and decision making in the provision and preparation of food in the home, including resources such as time and money, and values such as health and environmental sustainability
- the considerations in the design and adaptation of recipes to suit individuals, households and other groups with differing dietary requirements due to factors such as lifespan stage, activity level, personal food tastes and preferences, medical, cultural and ethical food restrictions, and food intolerances and allergies

- the economic, social, emotional and physical benefits of developing individual food skills and applying these skills in the home, and factors that enable the development of these skills
- the opportunities and pathways for the transition of practical food skills from domestic to entrepreneurial or commercial settings.

Key skills

- use equipment and techniques appropriately in the preparation of food in a domestic or small-scale setting
- understand and apply principles and practices in the sensory evaluation of food products
- compare and evaluate foods using sensory analysis and other measurements
- develop food knowledge and skills through consideration of the principles of effective planning, management, preparation and cooking of food
- design and adapt food in response to specific needs and considerations
- analyse the benefits of developing practical food skills and identify factors enabling the acquisition and application of these skills
- investigate food ideas that have moved into successful businesses
- apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of food in a range of practical activities.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks that provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study, including the key knowledge and key skills listed for the outcomes, should be used for course design and the development of learning activities and assessment tasks. Assessment must be a part of the regular teaching and learning program and should be completed mainly in class and within a limited timeframe.

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

The assessment for Outcome 1 is:

- design and develop a practical food solution in response to an opportunity or a need in the food industry or school community.

The assessment for Outcome 2 is:

- design and develop a practical food solution in response to an opportunity or a need in a domestic or small-scale setting.

Where teachers allow students to choose between tasks they must ensure that the tasks they set are of comparable scope and demand.

Unit 3: Food in daily life

This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Students investigate the physiology of eating and appreciating food, and the microbiology of digestion. They also investigate the functional properties of food and the changes that occur during food preparation and cooking. They analyse the scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating (see www.eatforhealth.gov.au) and develop their understanding of diverse nutrient requirements.

Area of Study 2 focuses on influences on food choice: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. Students inquire into the role of food in shaping and expressing identity and connectedness and the ways in which food information can be filtered and manipulated. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns.

The practical component of this unit enables students to understand food science terminology and to apply specific techniques to the production of everyday food that facilitates the establishment of nutritious and sustainable meal patterns.

Area of Study 1

The science of food

In this area of study students focus on the science of food. They investigate the physiology of eating and microbiology of digesting, and the absorption and utilisation of macronutrients. They investigate food allergies, food intolerances and the microbiology of food contamination. By identifying evidence-based principles, students develop their capacity to analyse advice on food choices. Students learn and apply food science terminology relating to chemical changes that occur during food preparation and cooking, and undertake hands-on experimentation to demonstrate techniques and effects. They apply knowledge in the safe production of nutritious meals.

Outcome 1

On completion of this unit the student should be able to explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse food selection models, and apply principles of nutrition and food science in the creation of food products.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- the physiology and conditioning of appetite, satiety and the sensory appreciation of food
- the microbiology of the intestinal tract and the sequential processes of the digestion of carbohydrates, protein, and fats, including enzymatic hydrolysis, absorption and utilisation of these macronutrients in the body
- the rationale and evidence-based principles of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating, with particular focus on the ways in which food selection can assist in the prevention of obesity and related lifestyle diseases
- biological reasons for differences in dietary requirements, considering factors including age, sex, pregnancy and lactation, and activity levels
- the physiology of food allergies and intolerances including how allergy and intolerance differ and their respective symptoms and causes and management

- microorganisms that cause food poisoning, their effects, and preventative practices for a safe food supply
- the principles of heat transfer in cooking techniques, and the effects on the properties of food of dry and moist heat, electromagnetic radiation, mechanical action, enzymes and changes to pH
- the functional properties of protein, sugar, starch, fats and oils in food, and the physical and chemical changes that occur to these components during preparation and cooking including dextrinisation, caramelisation, gelatinisation, emulsification, denaturation and coagulation, aeration, and the Maillard reaction.

Key skills

- explain appetite, satiety and the sensory appreciation of food
- explain the physiology of eating and digesting, and the absorption and utilisation of macronutrients
- apply the principles of the Australian Dietary Guidelines and Australian Guide to Healthy Eating to the planning of daily food intake and demonstrate a range of practical food skills to create healthy meals
- evaluate the nutritional quality of foods and meals
- explain and justify the substitution of ingredients in the management of food allergies and intolerances
- use appropriate food science terminology and techniques to describe and demonstrate chemical and physical changes to food during preparation and cooking
- use equipment and techniques appropriately, justify and apply principles of safe and hygienic food handling practices in the prevention of food poisoning, and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of nutritious meals in a range of practical activities.

Area of Study 2

Food choice, health and wellbeing

In this area of study students focus on patterns of eating in Australia and the influences on the food we eat. Students look at relationships between social factors and food access and choice, as well as the social and emotional roles of food in shaping and expressing identity, and how food may link to psychological factors. They inquire into the role of media, technology and advertising as influences on the formation of food habits and beliefs, and investigate the principles of encouraging healthy food patterns in children. In this area of study students undertake a practical component developing a repertoire of healthy meals suitable for children and families.

Outcome 2

On completion of this unit the student should be able to explain and analyse factors affecting food access and choice, analyse the influences that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a range of healthy meals for children and families.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- patterns of eating in Australia, including recent developments, changes and trends in food purchasing and consumption behaviours
- ways in which social factors across Australia, including education, income, location, accommodation, available time and cultural norms, influence food accessibility, food choice and healthy eating
- the social and emotional roles of food in shaping and expressing individual identity and connectedness, including its sharing and celebratory role within families, peer groups and communities
- emotional and psychological responses to food and food marketing, including behaviours and consequences relating to body image, restrictive dieting and comfort eating

- the role of the media in shaping food information and food choice, including the influence of marketing and advertising, news reportage, popular culture and social media
- relationships between current food systems and personal and social behaviours, with a focus on patterns that may encourage overconsumption of food and sedentary behaviour
- the role of modelling, exposure and repetition as key behavioural principles for the establishment of healthy diets in children and nutritious meal patterns within the home.

Key skills

- analyse recent changes and current trends in food behaviours and analyse social factors that may influence healthy eating
- explain social and emotional roles of food and analyse behaviours and explain consequences relating to the psychology of food
- analyse the role of media in shaping food information and influencing food choice
- explain and analyse links between food, behaviours and effects on health
- explain principles behind establishing healthy meal patterns in families
- apply practical food skills to demonstrate development of a repertoire of household meals
- use equipment and techniques appropriately, apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of healthy household meals in a range of practical activities.

School-based assessment

Satisfactory completion

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks to provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study and key knowledge and key skills listed for the outcomes should be used for course design and the development of learning activities and assessment tasks.

Assessment of levels of achievement

The student's level of achievement in Unit 3 will be determined by School-assessed Coursework. School-assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Where teachers provide a range of options for the same School-assessed Coursework task, they should ensure that the options are of comparable scope and demand.

The types and range of forms of School-assessed Coursework for the outcomes are prescribed within the study design. The VCAA publishes *Advice for teachers* for this study, which includes advice on the design of assessment tasks and the assessment of student work for a level of achievement.

Teachers will provide to the VCAA a numerical score representing an assessment of the student's level of achievement. The score must be based on the teacher's assessment of the performance of each student on the tasks set out in the following table.

Contribution to final assessment

School-assessed Coursework for Unit 3 will contribute 30 per cent to the study score.

Outcomes	Marks allocated*	Assessment tasks
<p>Outcome 1</p> <p>Explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse food selection models, and apply principles of nutrition and food science in the creation of food product.</p>	50	<p>The assessment tasks are:</p> <ul style="list-style-type: none"> a range of practical activities and records[‡] of two practical activities related to the functional properties of components of food <p>AND</p> <p>Any one or a combination of the following:</p> <ul style="list-style-type: none"> a short written report: media analysis, research inquiry, structured questions, case study analysis an annotated visual report an oral presentation or a practical demonstration a video or podcast.
<p>Outcome 2</p> <p>Explain and analyse factors affecting food access and choice, analyse the influences that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a range of healthy meals for children and families.</p>	50	<p>The assessment tasks are:</p> <ul style="list-style-type: none"> a range of practical activities and records[‡] of two practical activities related to healthy meals for children and families <p>AND</p> <p>Any one or a combination of the following:</p> <ul style="list-style-type: none"> a short written report: media analysis, research inquiry, structured questions, case study analysis an annotated visual report an oral presentation or a practical demonstration a video or podcast.
Total marks	100	

*School-assessed Coursework for Unit 3 contributes 30 per cent.

[‡]Records can include production plans and evaluations of products or analysis of dietary intake. See *Advice for teachers* companion document for further examples.

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 40 per cent.

Unit 4: Food issues, challenges and futures

In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land. Students research a selected topic, seeking clarity on current situations and points of view, considering solutions and analysing work undertaken to solve problems and support sustainable futures.

Area of Study 2 focuses on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions. They apply this methodology to navigate contemporary food fads, trends and diets. They practise and improve their food selection skills by interpreting food labels and analysing the marketing terms used on food packaging.

The practical component of this unit provides students with opportunities to apply their responses to environmental and ethical food issues, and to extend their food production repertoire reflecting the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

Area of Study 1

Environment and ethics

In this area of study students address debates concerning Australian and global food systems, relating to issues on the environment, ethics, technologies, food access, food safety, and the use of agricultural resources. Students conduct a critical inquiry into a range of debates through identifying issues involved, forming an understanding of current situations and considering possible futures. They research one selected debate in depth, seeking clarity on disparate points of view, considering proposed solutions and analysing work undertaken to solve problems and support sustainable futures. Students will consider environmental and ethical issues relating to the selected debate and apply their responses in practical ways.

Outcome 1

On completion of this unit the student should be able to explain a range of food systems issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- key issues of the challenge of adequately feeding a rising world population, with particular focus on proposed solutions to global food insecurity, including the potential contribution of technologies and improved equity in food access and distribution
- key ethical principles and questions of concern to Australian food consumers, and the ways in which ethical concerns affect individual food choices and the range of foods available
- key perspectives on:
 - the environmental sustainability of primary food production in Australia, including use of fertilisers, pesticides and water, choice of crops and animals for farming, and risks associated with biosecurity, climate change and loss of biodiversity
 - the environmental effects of food processing and manufacturing, retailing and consumption in Australia, including food packaging, food transportation and food wastage

- the characteristics, challenges and advantages of different approaches and methods in farming and primary food production, including genetically modified food production and low-impact and organic farming.

Key skills

- identify environmental and ethical questions and issues affecting food systems
- define global food security and explain possible pathways to achieving food security
- identify and explain diverse points of view in a range of food systems debates
- examine an array of issues and identify opportunities for further research
- apply research principles to clarify, analyse and draw conclusions on a selected topic
- apply a range of practical food skills to demonstrate understanding of sustainable and ethical food choice and preparation
- use equipment and techniques appropriately, apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of food, taking into account environmental and ethical questions in a range of practical activities.

Area of Study 2

Navigating food information

In this area of study students focus on food information and misinformation and the development of food knowledge, skills and habits. Students learn to assess information and draw evidence-based conclusions to navigate contemporary food fads, trends and diets. They investigate a selected food fad, trend or diet and assess its credibility and the reliability of its claims, taking into consideration the evidenced-based recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating. Students practise and improve their food selection skills by interpreting food labels and interrogating the marketing terms on food packaging. The practical component of this area of study provides opportunities for students to extend their food production repertoire by creating recipes that reflect the Australian Dietary Guidelines.

Outcome 2

On completion of this unit the student should be able to explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Guidelines.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- contemporary contexts in which food knowledge and skills develop and the factors that influence individual, family and community responses to food information
- the principles of research used in the development of Australian Dietary Guidelines, including the recognition of credible sources, evidence-based information and accurate analysis of data, and how these principles can be applied in response to contemporary food fads, trends and diets
- criteria used when assessing the validity of:
 - food information, including source, purpose, context, presentation of evidence and language use
 - claims made by weight-loss and nutrient supplement companies, including commercial gain, ethics, and the effectiveness of the product
- categories of compulsory and optional information contained on food labels, the purpose behind them, and the advantages of accurate label information for food consumers

- key elements of regulatory food standards relating to nutrition content claims and health claims on food labels and in advertisements
- practical ways to apply evidenced-based recommendations relating to food and health, including the Australian Dietary Guidelines and the Australian Guide to Healthy Eating, to everyday food behaviours and habits, with particular attention to maintaining a healthy weight.

Key skills

- identify a variety of contexts in which food knowledge and skills takes place
- analyse reasons for different responses to food information and apply research principles to assess food information and justify the role of the Australian Dietary Guidelines as evidence-based recommendations
- analyse the nutritional efficacy of contemporary food fads, trends and diets
- identify the components of a food label and summarise the purpose of each
- use food labels appropriately to compare, select and prepare food
- demonstrate understanding of the Australian Guide to Healthy Eating by applying it to practical food selection, planning and preparation and cooking activities
- use equipment and techniques appropriately, apply principles of safe and hygienic food handling practices and demonstrate organisational and technical skills in relation to the preparation, cooking and presentation of food according to the Australian Guide to Healthy Eating in a range of practical activities.

School-based assessment

Satisfactory completion

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers should use a variety of learning activities and assessment tasks to provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes.

The areas of study and key knowledge and key skills listed for the outcomes should be used for course design and the development of learning activities and assessment tasks.

Assessment of levels of achievement

The student's level of achievement in Unit 4 will be determined by School-assessed Coursework. School-assessed Coursework tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

Where teachers provide a range of options for the same School-assessed Coursework task, they should ensure that the options are of comparable scope and demand.

The types and range of forms of School-assessed Coursework for the outcomes are prescribed within the study design. The VCAA publishes *Advice for teachers* for this study, which includes advice on the design of assessment tasks and the assessment of student work for a level of achievement.

Teachers will provide to the VCAA a numerical score representing an assessment of the student's level of achievement. The score must be based on the teacher's assessment of the performance of each student on the tasks set out in the following table.

Contribution to final assessment

School-assessed Coursework for Unit 4 will contribute 30 per cent to the study score.

Outcomes	Marks allocated*	Assessment tasks
<p>Outcome 1</p> <p>Explain a range of food systems issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.</p>	60	<p>The assessment tasks are:</p> <ul style="list-style-type: none"> a range of practical activities and records[‡] of two practical activities related to sustainable and/or ethical food choices <p>AND</p> <ul style="list-style-type: none"> a written report that includes a selected food-related topic, explanation of concerns related to environment, ethics and/or equity, analysis of work being done to solve problems and support solutions, and a conclusion outlining major findings and suggested set of practical guidelines for food consumers.
<p>Outcome 2</p> <p>Explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Guidelines.</p>	40	<p>The assessment tasks are:</p> <ul style="list-style-type: none"> a range of practical activities and records[‡] of two practical activities related to healthy food choices based on the Australian Guide to Healthy Eating. <p>AND</p> <p>Any one or combination of the following:</p> <ul style="list-style-type: none"> a short written report: media analysis, research inquiry, structured questions, case study analysis an annotated visual report an oral presentation or a practical demonstration a video or podcast.
Total marks	100	

*School-assessed Coursework for Unit 4 contributes 30 per cent.

[‡]Records can include production plans and evaluations of products or analysis of dietary intake. See *Advice for teachers* companion document for further examples.

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination.

Contribution to final assessment

The examination will contribute 40 per cent.

End-of-year examination

Description

The examination will be set by a panel appointed by the VCAA. All the key knowledge and key skills that underpin

the outcomes in Units 3 and 4 are examinable.

Conditions

The examination will be completed under the following conditions:

- Duration: one and a half hours.
- Date: end-of-year, on a date to be published annually by the VCAA.
- VCAA examination rules will apply. Details of these rules are published annually in the [VCE and VCAL Administrative Handbook](#).
- The examination will be marked by assessors appointed by the VCAA.

Further advice

The VCAA publishes specifications for all VCE examinations on the VCAA website. Examination specifications include details about the sections of the examination, their weighting, the question format/s and any other essential information. The specifications are published in the first year of implementation of the revised Unit 3 and 4 sequence together with any sample material.