Government of **Western Australia**
School Curriculum and Standards Authority

FOOD SCIENCE AND TECHNOLOGY

General course

Year 12 syllabus – What's changing: Rationale and Aims

For teaching in 2027

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

Background

As part of the Western Australian Certificate of Education (WACE) Refreshment for reviewing the nomenclature of courses, the Authority has updated the rationale and aims of each syllabus.

The revised rationale and aims are aligned with the mapping of the general capabilities to provide clear connections between the rationale, aims and syllabus content. The rationale outlines what the subject is about and why it is important. It describes what students can expect to study in the course, along with the knowledge, skills and understandings they will develop throughout the course. It also explains how these can be applied in everyday life and references potential future pathways, outlining how students might connect what they learn in the course to further education, training and employment opportunities.

Important information

WACE Refreshment: Reviewing the nomenclature of courses

This document contains information that will be included in the syllabus effective from 1 January 2027.

Users of the syllabus are responsible for checking its currency.

Syllabuses are formally reviewed by the Authority on a cyclical basis, typically every five years.

Rationale

The Food Science and Technology General course builds on students' appreciation and understanding of ways that food is sourced, selected, prepared, served and shared. Students recognise the functional properties and composition of a range of foods and connect these with the needs and wants of individuals and communities and the ways producers adjust processes for improved performance. They examine the application of the regulatory requirements related to the production, handling and storage of food and understand how food security may be achieved through the supply of safe, secure and sustainable food products for all.

Students investigate food as a commodity. They apply the technology process to investigate issues, problem-solve through design and analyse processing systems. Through this process they manipulate, improve and create innovative solutions for individual and demographic groups' specific food needs. Students also consider factors related to food preferences, secure supply chains, production processes and ethical considerations. With innovations in science and technology, new food products, processes and packaging evolve to meet changing consumer demands. Students learn about new and emerging foods and investigate the science of foods and the design, development and marketing of a range of products, services and systems. They consider and apply sensory, physical, chemical, social and ethical factors, and functional properties of food, to create new food products, improve packaging and integrate preservation methods to meet food needs.

Students adapt and incorporate the continually evolving practices, processes, technologies and requirements of the food industry, with a focus on practical skills and professional expectations. They investigate social and local community responsibilities, ethical practices, food trends and new and emerging foods as they design and create meals for specified requirements. They use an agile approach to apply processes required to manage production, resources, time, systems, food selection, appropriate technologies and efficient service.

Students in the course acquire, develop and apply practical skills for use in everyday life. These skills are transferable to the workplace and support confidence, independent living and an appreciation of environmental resources. Key skills developed in the course include project management, collaboration, problem-solving, effective communication, leadership, selection and safe use of food-related technologies and application of regulatory requirements.

The course equips students with knowledge and skills that prepare them for further education and careers in fields such as nutrition, child health, aged care, community services, the allied health sector, public health, hospitality, marketing, food manufacturing and processing, food service and management. Through practical experience and industry-relevant information, students become informed contributors to the local community and acquire knowledge and skills for the robust and expanding food industry.

Aims

The Food Science and Technology General course aims to develop students':

- knowledge, skills and understanding of food science, food for health and the application of a range of technologies to assist in food production, processing systems and services
- ability to investigate the properties of foods and examine how they are used and processed to meet identified needs, utilising appropriate equipment and food-related processing systems
- application of the technology process to investigate opportunities, generate ideas, design products and manage production to develop and market food-related products, services or systems
- application of self-management, communication and organisational skills, and operational procedures, to work within regulatory requirements and productive food-related environments
- appreciation of beliefs and values of stakeholders, resource management decisions and safe, sustainable practices that impact food-related technologies and industries.