**Food Studies – Unit 1 – 4**

The new VCE Units 1-4 Food Studies course has been released by the Victorian Curriculum and Assessment Authority and is due to be implemented at the beginning of the new school year in January 2017. The Food Studies Study Design can be downloaded [here](http://www.vcaa.vic.edu.au/Documents/vce/technology/FoodStudiesSD_2017.pdf)

**Overview**

This powerful, exciting and innovative course focuses on food from a diverse range of socio-cultural, historical and contemporary perspectives and is designed to appeal to an equally diverse range of students who are keen to explore food and extend their knowledge and practical food skills. A strong emphasis on practical food skills is underpinned by theoretical understandings of how food is situated in domestic, agricultural and commercial settings within Australia and globally.

**Rationale**

Students are set to explore current issues such as environmental sustainability and ethical and moral decisions shaping our local, national and global food supply – the very issues that are the very core of a functioning, peaceful, productive and equitable world. Such questions are posed as ‘How do you feed a hungry planet of a projected 9 Billion people?’ Students are guided through the evidence-based data to pose questions and make viable prognoses and propose solutions of their own.

**Who should take the course?**

Food security is at the heart of this new course and this topic is sure to appeal to this generation of Food students who care about the planet and have question marks about the same moral, social and economic decisions that face our politicians, non-government organisations and policymakers. In short, this powerful Food Studies course with its emphasis on inquiry, decision-making and problem-solving will provide senior students with personal and vocational opportunities to make confident food decisions as consumers and acquire valuable skills and knowledge linked to food- and nutrition-related professions.

**Acknowledgements for additional resources and input**

Ms Catherine Freney, colleague and home economics teacher

Ms Lea Compton, VCAA Technologies Key Learning Manager

Over the next few months I will be adding resources including learning activities, assessment ideas and links to support materials to support your teaching of this new and exciting course.

Unit 4

**Introduction and overview**

Hello my name is Sandra Fordyce-Voorham and it is my pleasure to take you through the Unit 4 component of the new Study Design. Unit 4 builds on the knowledge and skills introduced in Unit 3 and fully applies these concepts to explore issues fundamental to securing people’s food supply to achieve their dietary requirements at a local, community and global level.

What makes Unit 4 so exciting for students is that it is responsive to many of the core concerns that many people have about the current state of the world – the content of the course lies at the heart of these issues. Students undertaking this course have the opportunity to really explore the ‘big picture’ issues concerning them right now – climate change, live cattle trade, inequitable distribution of food resources- just how do we feed 7 billion people? Taking the emotion and heat out of these debates, students are guided through the objective and evidence-based information to make defensible judgments to build on their understanding and confidence in developing creative but equally viable and practical solutions to current food concerns.

Unit 4 consists of two Areas of Study. I will proceed to outline each one and through illustration with examples provide a breakdown of the key components of the Study Design.

Area of Study One titled ‘Environment and Ethics’ takes students through a range of topical and relevant local and global food issues such as environment sustainability, modern versus traditional farming practices, research and development of food technologies, food availability, accessibility and wastage linked to protecting food security, amongst others. Students explore these issues and have the opportunity to investigate a specific issue of interest. Here, they are able to identify and evaluate possible solutions to problems and make judgments and forecasts that aim to support sustainable futures. Applying the theoretical solutions in their practical work, students will have the opportunity to test out their ideas through a range of food trials such as novel alternatives to animal (insect) protein (earthworms), use of sustainable fish (eg carp $7-99/kg – inventive ways of using up cheaper and less desirable fish in a fish patty), complementary vegetable proteins (blending vegetable sources to restore full complement of amino acids). Students also need to give consideration to how their proposed solutions accommodate ethical and environmental concerns that consumers might have as well as ensuring that food preparation techniques are performed safely and hygienically.

Area of Study Two titled ‘Navigating food information’ enables students to investigate information and common misinformation about food, food trends and diets. This area of Unit 4 provides opportunities for students to evaluate, debate and defend their ideas based on accruing scientific and evidence-based research such as the Australian Dietary Guidelines and the Australian Guide to Healthy Eating (which incidentally is based on 55,000 items of evidence-based research). Included in their knowledge journey, students learn to interpret food labelling information and make judgements about how food is marketed which underpins and advances their own knowledge and skills as informed, confident consumers in the marketplace. Applied to the practical work students could use a dietary analysis software program such as [Food Choices](http://svc010.wic008p.server-web.com/default.html) to analyse foods and trendy diets (is low-carb diet the new Dr Atkins?) to support analyses. In addition to government sources of data (such as the AGTHE and the ADG) students are able to discern and make decisions to supplement reliable and evidence-based sources of information to support their research evaluation. For example, Australian Dietitians Association and the [Paleo Diet](http://daa.asn.au/for-the-public/smart-eating-for-you/nutrition-a-z/paleo-diet/part-1-the-paleo-diet-what-is-it/).

Practical work remains an integral of the course and is used to endorse and validate assumptions made in the research component. For example, post-comparison analysis between a meal based on the EatWell Plate and a low-carb meal based on sensory property evaluation and consumer taste-testing. Further information about the practical activities are outlined below.

**Considerations for constructing and selecting practical and learning activities**

When students make their decision regarding topic choice for the AOS Outcome 1 written report they need to ensure that they are able to apply questions of environmental sustainability, ethics and/or social equity to their chosen topic. It is recommended that students seek teacher approval of their topic prior to commencement of their research. It is also suggested that topics are set out as questions to be answered. Examples of appropriate topics are provided in the detailed description of the task.

AOS Outcome 2 provides more freedom and choice for students to really demonstrate their passion in particular areas of food interest. For example, students will have the opportunity to investigate a food trend and/or diet and evaluate their selected issue using the scientific evidence of the Australian Dietary Guidelines. Students will be given time in class to explore problem-solving solutions and test out ideas of their own in practical hands-on sessions, as they have always done in the past Study Design. Teachers will operate as facilitators and from the outset will help guide their students through the process of constructing viable hypotheses or posed questions that can be realistically explored in the Unit 4 timeframe.

The Advice for Teachers document provides a broad range of short and lengthier learning activities that are designed to develop students’ understanding and skills. Teachers will know what will work and be most relevant to their students’ learning interest and capabilities so selections should be based on these factors. Teachers are encouraged to set aside time to think about what will work and strategically select those learning ideas.

Do remember that these suggestions are NOT prescriptive and teachers will most likely have their own bank of learning activities (possibly from previous courses) and relevant content they have taught in the past- it’s about working smarter! Individual school circumstances, location and available resources need to be considered and factored into curriculum planning. For example, teachers in schools in metropolitan areas may have access to farmers’ markets whereas those in regional and rural areas have direct access to farmers and food producers. Seek out and make the most of getting in contact with resource personnel now. Link and network with teachers in nearby schools to expedite these opportunities. Be strategic too and create learning activities that cover a number of key knowledge and skills dot points. Additional examples that follow provide examples of activities that do just that!

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| **Unit 4 Food issues, challenges and futures****(See Unit 4 Advice for teachers\_Joanne Scanlan)** |
| **AOS 1 Environment and ethics** |
| **Learning Ideas, lessons and timeline** | **Practical Activities** | **Resources** |
| DP1 Key issues of feeding a rising world population including solutions to food security and equitable food distribution-demands for animal protein as developing countries become more prosperous-complementary protein sources (beans+corn, rice and grains)  | 1. *Debate* the following topic; “as people in transitioning to development countries (such as China) increase in prosperity and demands for animal protein increases, people in existing developed countries move towards vegetables, legumes and insects as alternative protein sources” This practical activity requires students to research ethical, moral and environmental concerns held by people in prosperous countries and their move towards eating more vegetable and alternative protein sources (insects?. The debate planning requires students to imagine and prognose outcomes of feeding a hungry world.Proposed hypothetically, students can research “As people in the developing world become more prosperous their demand for animal protein increases simultaneous to people in the developed world eating more vegetable and novel sources (such as insects)” 1. Practical activity: students explore complementary protein sources (rice and grains, beans and corn) and plan, produce, present and evaluate a meal and its chemical and sensory properties.
 | 1. [Food and Agricultural Organisation](Unit4/JS_FoodStudiesSD-final-draft.docx) <http://www.fao.org/docrep/018/i3253e/i3253e.pdf>

[Meatless Monday movement](http://www.meatlessmonday.com/the-global-movement/) <http://www.meatlessmonday.com/the-global-movement/> 2.Vegetarian Society Site visited: 07 April 2016 [https://www.vegsoc.org/protein#](https://www.vegsoc.org/protein) FAO- This article comprehensively describes the role of individual essential nutrients including the role of mixed protein diets in various population groups <http://www.fao.org/docrep/w0078e/w0078e08.htm> Information about complementary protein combination and associated recipes can be found in Stanton, R. Healthy Cooking Murdoch Books, Sydney NSW 1993 pp.182-3Edible cutlery <http://www.tastingtable.com/cook/national/edible-cutlery-utensils-bakeys-india-food-packing-waste>  |
| DP2 Ethical principles and qns of concern to Australian consumers- ethical concerns affecting food choices and range of foods available-Free Range eggs  | 1. **Consumer information analysis**- how well do you know your eggs?-*Perform* a dollar cost comparison between the various eggs available: organic, free range, barn laid and caged eggs. - *Conduct* a focus group amongst your peers to determine their understanding of the different classifications. - *Describe* the egg classifications and create an infographic that helps consumers make their egg purchasing decisions (refer to <https://www.choice.com.au/consumer-advocacy/campaigns/free-range-egg-labelling> ) 1. **Outcome 1: a written report that includes a selected food-related topic, explanation of concerns related to the 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 consumers.**

*Locate* an article, media report on one of the following issues (or one of your own)-sustainable fishing - food miles (local food)- community gardens- farmers markets-GM Foods- permaculture-organic, biodynamic…what is the sameness?*Conduct* a [SWOT](https://www.business.qld.gov.au/business/starting/market-customer-research/swot-analysis/uses-swot-analysis) analysis to determine the viability and suitability of your issue for the individual, family, community, nationally and globally.*Use a* [*decision-making process tool*](https://www.google.com.au/search?q=decision+making+process+in+management&espv=2&biw=853&bih=383&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjH6pDhtvvLAhVI4qYKHdEyDhQQ7AkINA&dpr=2.25#imgrc=RG-lA2AXDpqO4M%3A)to help you justify or/and defend your position.  | 1. Compton, L. and Warren 2015 Total Food OUP Sydney, Australia pp. 114 (Sustainability), pp.134-135 (basic information)

Egg classifications <http://www.makeitpossible.com/guides/egg-labels.php> Are all eggs the same? Media analysis- <https://www.choice.com.au/consumer-advocacy/campaigns/free-range-egg-labelling> 1. Sustainable Seafood guide “The fish we choose today affects the oceans of tomorrow’ <http://www.sustainableseafood.org.au/> accessed April7, 2016

Sourcing local food ‘finding good food close to you” <http://www.localharvest.org.au/> accessed April 7, 2016National Geographic: Feeding the planet <http://www.nationalgeographic.com/foodfeatures/feeding-9-billion/> accessed April 7, 2016 |
| DP3 Key perspectives on – -Environmental sustainability of primary food production -environmental effects of food processing and manufacturing, retailing and consumption in Aust including food packaging, transportation and wastage |  |  |
| DP4 the characteristics, challenges and advantages of different approaches and methods in farming and primary food production, including GM food production and low-impact and organic farming.  | See above – this dot point can be incorporated in the  |  |
| **AOS2 Navigating food information** |
| **Learning Ideas, lessons and timeline** | **Practical Activities** | **Resources** |
| DP1 Contemporary contexts in which food knowledge and skills develop and factors that influence individual, family and community responses to food informationHow marketing can be used to inform/misinform or confuse consumers.What are current food fads, diets and trends? | **Outcome 2- 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 dietary guidelines****Research Evaluation (incorporates DPs 1-6)***Investigate* and *describe* a current diet or trend such as -the Paleo diet, Whey Protein Powders for muscle-building, low-carb diet *How* and *to whom* is the diet or trend marketed towards?*Evaluate* the diet or trend based on the evidence-base of the [Australian Dietary Guidelines](https://www.eatforhealth.gov.au/guidelines) and/or the [Australian Guide to Healthy Eating](https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating)*Create* a modification to the diet or trend to align with the recommended guidelines. *Promote* how the modification could be advertised to the targeted consumer (for example, create a television advertisement that promotes the modification or defends against the diet or trend) | Use a dietary analysis software program such as [Food Choices](http://svc010.wic008p.server-web.com/default.html) to analyse foods to support analyses.Use reliable and evidence-based sources of information to support the research evaluation. For example, Australian Dietitians Association and the [Paleo Diet](http://daa.asn.au/for-the-public/smart-eating-for-you/nutrition-a-z/paleo-diet/part-1-the-paleo-diet-what-is-it/) |
| DP2 Principles of research used in the development of ADG, and how these principles can be applied to contemporary food fads, trends and diets |  |  |
| DP3 Criteria used when assessing the validity of-food information-claims made by weight-loss and nutrient supplement companies |  |  |
| DP4 Categories of compulsory and optional information contained on food labels, the purpose behind them and the advantage of accurate label information for consumers |  | Food Standards Code: [FSANZ](http://www.foodstandards.gov.au/Pages/default.aspx) |
| DP5 elements of regulatory food standards relating to nutrition content claims and health claims on food labels and in advertisements |  |  |
| DP6 practical ways to apply evidenced-based recommendation relating to food and health, including the ADGs and AGTHE, to everyday food behaviours and habits, with particular attention to maintaining a healthy weight.  |  |  |

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