

Full Title:	Culinary Science and Food Safety
Module Code:	CULN B6023
Credits:	5
Valid From:	Semester 1 - 2013/14 (September 2013)
Module Delivered in	2 programme(s)
Module Description:	This module provides the learner with the knowledge and skills necessary to adhere to best practice and legal requirements relating to food safety, food preservation and food quality.
Learning Outcomes:	
<i>On successful completion of this module the learner should be able to</i>	
<ol style="list-style-type: none"> 1. Describe the main personal responsibilities and hygiene requirements for food safety in line with hygiene regulations. 2. Outline the basic principles of Microbiology. Identify food safety hazards and apply a food safety management system to the production of food items. 3. Identify and explain the legislation governing food safety legislation, food safety training requirements and the nutritional content of food. 4. Describe the principles of quality assurance and sensory analysis relating to the food sector 5. Understand the principles of food preservation methods and their application in the professional kitchen. 	

Module Content & Assessment

Indicative Content
<p>Hygienic Work Practices Personal Hygiene, Personal Responsibilities, Controlling Infection, Reporting Illness, Kitchen Hygiene, Cross Contamination, Temperature Control, Pest Control, Cleaning Principles.</p>
<p>Basic Microbiology Factors contributing to Food Poisoning Outbreaks, Food Safety Hazards, Characteristics of Bacteria, Moulds, Yeasts, Viruses. Food Poisoning Organisms, Food Borne diseases.</p>
<p>Food Safety Management Systems (Hazard Analysis Critical Control Points (HACCP)) Principles of HACCP, Management Responsibilities, Prerequisite Requirements, Process Flowcharts, Hazard Analysis, Critical Control Points, Critical Limits, Monitoring and Corrective Action Procedures, Record Keeping Requirements, Importance of Verification, Failure of Hazard Analysis Critical Control Points (HACCP). Safe Catering Guide (FSAI)</p>
<p>Food Safety Training and Enforcement Food Safety Training, Training Approaches/ Competencies, Food Hygiene Regulations, Labelling Requirements, Traceability Requirements, Food Safety Authorities, Enforcement Authorities, Role of Enforcement Authorities and Enforcement Officers.</p>
<p>Legislation of Food Nutritional labelling, nutrition and health claims, legal requirements. 'Calories on the menu'. Salt reduction targets and the implications and their implementation. Labelling of GM foods, novel foods, organic foods, allergens, beef, fish, meat products, preserves, functional and fortified foods.</p>
<p>Quality Assurance Sensory Analysis, Senses, Test Methods. Concept of food quality, Deterioration of food quality and its control, Role of quality systems in ensuring food quality.</p>
<p>Preservation Reasons for preservation Natural preservatives used within the kitchen: salt, alcohol, sugar, acids wood Basic principles of current methods of preservation; eg., pouch-sealing, Modified Atmosphere Packaging (MAP) , aseptic packaging, waxing Additives; classification, use, current recommended level in foods Future trends in preservation</p>

Assessment Breakdown	%
Course Work	100.00%

Full Time

Course Work							
<i>Assessment Type</i>	<i>Assessment Description</i>	<i>Outcome addressed</i>	<i>% of total</i>	<i>Marks Out Of</i>	<i>Pass Marks</i>	<i>Assessment Date</i>	<i>Duration</i>
Non-DKIT Exam	Based on Industry requirements, it would be foreseen that students could independently partake in The CIEH Level 2 Award in Practical Food Safety for Catering. This would encompass a 30 Multiple choice exam and practical assessment.	1,2,3	30.00	0	0	Week 8	0
Project	The project will examine the concept of food quality in relation to Sensory analysis, food labelling and food preservation.	3,4,5	20.00	0	0	Week 12	0
Class Test	In-class Test	1,2,3,4,5	50.00	0	0	Week 13	0

No Project

No Practical

No End of Module Formal Examination

Reassessment Requirement**A repeat examination**

Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.

Reassessment Description

Students will undertake a repeat examination. Repeat CA will also be offered if required. Students repeating the CEIH Level 2 will incur the repeat fees from the Award Body.

DKIT reserves the right to alter the nature and timings of assessment

Module Workload & Resources

Workload: Full Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	In Class contact	3.00	Every Week	3.00
Directed Reading	Directed reading and online activities via Moodle	3.00	Every Week	3.00
Independent Study	Self directed learning	3.00	Every Week	3.00
Total Weekly Learner Workload				9.00
Total Weekly Contact Hours				3.00

This course has no Part Time workload.

Resources
<i>Recommended Book Resources</i>
<p>Sprenger, R.A. 2013, <i>The Food Safety Handbook (EHOA - Ireland)</i>, 2nd Ed., Highfield.co.uk limited, UK [ISBN: 978-1-909749-02-3]</p> <p>Sprenger, R.A. 2012, <i>A Question of Food Safety (EHOA - Ireland)</i>, 2nd Ed., Highfield.co.uk limited UK [ISBN: 978-1907751-63-9]</p> <p>Sprenger, R. A. 2012, <i>Hygiene for Management</i>, 16 Ed., Highfield.co.uk limited UK [ISBN: 978-1-907751-68-4]</p> <p>Sprenger, R. A. 2010, <i>The Foundation HACCP Handbook</i>, 4th Ed., Highfield.co.uk limited UK [ISBN: 978-1-906404-83-3]</p> <p>Gaman, P.M., Sherrington, K.B. 1996, <i>Science of Food: Introduction to Food Science, Nutrition and Microbiology</i>, Butterworth-Heinemann UK [ISBN: 978-0750623735]</p>
<i>Supplementary Book Resources</i>
<p>Sprenger, R.A. 2010, <i>The Food Safety Handbook (Level 2)</i>, 29 Ed., Highfield.co.uk limited UK [ISBN: 978-1-907751-11-0]</p>
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
<p>website: <i>European Food Safety Authority</i> http://www.efsa.europa.eu</p> <p>website: <i>Food Safety Authority of Ireland</i> http://www.fsai.ie</p> <p>website: <i>Environmental Health Officers Association (Ireland)</i> http://www.ehoa.ie</p> <p>Information Pack / CD ROM: Food Safety Authority of Ireland (FSAI) 2012, <i>Safe Catering - Your Guide to Making Food Safely</i></p> <p>Guide: FSAI 2009, <i>Guide to Food Safety Training. Level 1- Induction Skills & Level 2- Additional Skills</i></p> <p>Information Pack: FSAI 2010, <i>HACCP Information Pack</i></p> <p>Guide: FSAI 2003, <i>Guide to Food Safety Training. Level 3 - Food Safety Skills for Management</i></p> <p>Guide: FSAI 2011, <i>General Labeling of Pre-Packaged Food</i></p> <p>Guide: FSAI 2012, <i>Putting Calories in Menus in Ireland</i></p> <p>National Standards Authority of Ireland (NSAI): NSAI.S. 340: <i>1994 Hygiene in the Catering Sector</i></p> <p>National Standards Authority of Ireland (NSAI): NSAI.S.343: <i>2000 Food Safety Management incorporating Hazard Analysis Critical Control Point (HACCP)</i></p>

Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_BCULA_7	Bachelor of Arts in Culinary Arts	1	Mandatory
DK_HCULA_6	Higher Certificate in Arts in Culinary Arts	1	Mandatory