

# **MODULE DOCUMENTATION**

## **Introduction to Sensory and Consumer Science**

**HOSP07057**

Mandatory

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<b>Full Title</b>	Introduction to Sensory and Consumer Science		
<b>Status</b>	Uploaded to Banner	<b>Start Term</b>	2017
<b>NFQ Level</b>	07	<b>ECTS Credits</b>	05
<b>Module Code</b>	HOSP07057	<b>Duration</b>	Semester - (13 Weeks)
<b>Grading Mode</b>		<b>Department</b>	Culinary Arts
<b>Module Author</b>	Clare Gilsenan		

### Module Description

Sensory and Consumer Science play an integral part in the commercial success of manufactured food products. This module critically evaluates the role of sensory and consumer science in marketing, product development, quality assurance. It appraises the forces impacting consumer acceptance and food choice from a sensory perspective. Students will apply sensory training and testing techniques in numerous sensory assessment situations.

### Learning Outcomes

**On completion of this module the learner will/should be able to:**

1. Appraise the forces impacting consumer acceptance and food choice from a sensory perspective.
2. Critically evaluate sensory analysis concepts, techniques and theories.
3. Apply sensory evaluation techniques in sensory assessment situations.
4. Demonstrate interpersonal skills and abilities such as communications, problem solving and team work skills.
5. Articulate the role of consumer science research in the new food product development sector.

### Indicative Syllabus

#### Factors affecting consumer acceptance and food choice from a sensory perspective.

Food Acceptance as a model

Understanding the psychology of food choice

#### Critically evaluate sensory analysis concepts, techniques and theories

Roles of Sensory Science in marketing, product development, quality assurance

#### The Senses: Taste–Gustation

–primary tastes, anatomy, physiology, and chemistry of taste. Transducer and neural effects including receptor types, stimulus- receptor transducer mechanisms, neural channels, neural codes, and cortical cell types and mechanisms; taste modifiers; adaptation of taste.

#### The Senses: Olfaction and Tactile

Olfaction–anatomy, physiology and chemistry of smell, transduction, adaptation, classification systems, illusions.

Tactile -tactile sensations, temperature, mouthfeel, pungency, heat, trigeminal pain.

#### The Senses: Vision and Audition

Vision –eyes: design and anatomy; visual organization including rods, cones, detection, contrast effects, depth, color perception, after effects, adjustments to distorted vision.

Audition–mechanisms, anatomy, adaptation, delayed feedback, sound location.

#### The Senses and the Brain

Tricks the senses may play, senses and the brain, information overload, attention and adaptation, context, illusions.

The Mind–how information is processed, analytical and affective components of sensation.

Instruments–physiological and psychological biases–what can we do?

Theory of Sensory Measurement–response bias, psychophysics.

#### Sensory Evaluation Techniques

Affective Test Methods  
 Discriminative Test Methods  
 Descriptive Test Methods  
**Consumer Science**  
 The Consumer in Context  
 Environmental Influences  
 Studying Behaviours  
 Focusing on Focus Groups  
 Influencing Innovation

### Teaching and Learning Strategy

There are three forms of assessment utilised in this module, namely a terminal written exam which is assessed out of 50%, one group project which is assessed out of 30% and an essay which is worth 20% of the students final mark. The project allows the students to work as a team and apply their knowledge to real life sensory analysis scenarios. The essay will be centered on a critical analysis of a sensory science or consumer research theme as selected by the lecturer.

### Assessment Strategy

50% Final Exam at the end of the semester  
 30% Group Project  
 20% Essay

### Repeat Assessment Strategies

Repeat Exam

Indicative Coursework and Continuous Assessment:		50 %		
Form	Title	Percent	Week (Indicative)	Learning Outcomes
Group Project	Group Project	30 %	Week 9	1,2,3,4,5
Essay	Essay	20 %	Week 4	1

End of Semester / Year Formal Exam:		50 %		
Form	Title	Percent	Week (Indicative)	Learning Outcomes
Closed Book Exam	Final Exam	50 %	Week 12	1,2,3,4,5

Full Time Delivery Mode Average Weekly Workload:			4.00 Hours		
Type	Description	Location	Hours	Frequency	Weekly Avg
Lecture	Theoretical Lecture	Flat Classroom	1	Weekly	1.00
Practical	Practical Workshop	Laboratory	3	Weekly	3.00

### Recommended Reading Book List

Kilcast, D., (2010). [ { *SENSORY ANALYSIS FOR FOOD AND BEVERAGE QUALITY CONTROL: A PRACTICAL GUIDE (WOODHEAD PUBLISHING SERIES IN FOOD SCIENCE, TECHNOLOGY AND NUTRITION) - IPS* } ] by Kilcast, David (AUTHOR) May-24-2010 [ Hardcover ]. Woodhead Publishing.

Civille, G., (2015). *Sensory Evaluation Techniques, Fifth Edition*. CRC Press.

(2016). *Flavour: From Food to Perception*. Wiley-Blackwell.

MacFie, H., *Food Choice, Acceptance and Consumption*. Springer.  
 ISBN 1461285186 ISBN-13 9781461285182

(2001). *Food, People and Society: A European Perspective of Consumers' Food Choices* Springer.  
ISBN 3540415211 ISBN-13 9783540415213

### Literary Resources

Graves, (2013) *Consumerology*, Brealey

Kemp, S.E., Hollowood, T. and Hort, J. (2009) *Sensory Evaluation A Practical Handbook*.

Oxford:Wiley-Blackwell.

Meilgaard, M.C., Civille, G.V. and Carr, B.T. (2007). *Sensory Evaluation Techniques*, (4 th ed). Boca Raton: CRC Press.

Taylor, A.J. and Roberts, D.D. (2004). *Flavour Perception*. Oxford: Blackwell Publishing.

### Other Resources

ISO 8589: Sensory analysis-General guidance for the design of test rooms. (2007). Geneva: International Organisation for Standardization

ISO 4120: Sensory analysis - Methodology - Triangle Test. (2004). Geneva: International Organisation for Standardization

ISO 8586-1: Sensory analysis- general guidance for the selection, training and monitoring of assessors. (1993). Geneva: International Organisation for Standardization

ISO 5492: Sensory analysis- Glossary of terms relating to sensory analysis. (1992). Geneva: International Organisation for Standardization

ISO 6564:85: Sensory analysis- Flavour profile method. (1985) Geneva: International Organisation for Standardization.

### Programme Membership

GA\_OCGSG\_B07 202000 Bachelor of Arts in Culinary and Gastronomic Sciences

GA\_OCGSG\_H08 202000 Bachelor of Arts (Honours) in Culinary and Gastronomic Sciences