

SYLLABUS COURSE

GENERAL INFORMATION

Course name: AI and Digital Innovations in Food Marketing and Cross-Cultural Consumer Trends

A cademic session: Summer Academy Academic credits:

Dates: June 17th to 28th, 2023

Name of professor: DAMIR DENNIS TORRICO ARISPE, Ph.D.

COURSE DESCRIPTION

Food products are increasingly globalized worldwide. Presently, diverse cultures and populations have access to international foods, thereby altering consumer preferences and choices. Sensory and consumer sciences constitute scientific disciplines utilized to evoke, measure, analyze, and interpret reactions to the various intrinsic and extrinsic characteristics of foods, beverages, and packaging as perceived by the human senses. These sciences are foundational in product optimization strategies. Recently, there has been a significant shift in the digital innovation of methodologies for assessing consumers. Novel technologies, including emotion analysis via facial recognition, biometric techniques coupled with computer vision, eye-tracking to understand end-user's attention, and the implementation of virtual/augmented reality environments, are revolutionizing our understanding of food consumption. This course will provide students with a comprehensive insight into evaluating consumer behaviors using novel digital technologies such as facial recognition, eye-tracking, and virtual/augmented reality environments. Additionally, students will analyze current globalized food trends in cross-cultural settings. Moreover, the course will include a section on artificial intelligence in marketing, exploring how novel analytical tools can be used to understand consumer behaviors.

CONTENT

- 1: Introduction to Globalized Food Trends
 - Overview of the globalization of food products
 - Introduction to sensory and consumer sciences in product optimization
- II: Digital Innovations in Consumer Assessment
 - Evolution of methodologies for assessing consumer behaviors
 - Introduction to novel technologies: facial recognition, biometric techniques, computer vision, and eye-tracking
- III: Evaluating Consumer Behaviors with Digital Technologies
 - Practical applications of virtual/augmented reality environments in consumer studies
 - Case studies of using digital technologies in consumer research
- IV: Artificial Intelligence in Marketing and Consumer Trends
 - Introduction to artificial intelligence in marketing
 - Exploring how Al-powered analytical tools can enhance understanding of consumer behaviors



METHODOLOGY

This course is taught in a lectures-based modular format with one hour of class meeting time per day (10 hours total). In addition, there will be a practical component (tasting of foods and discussions) to the course, which will entail one 1-hour practice session each day (10 hours total). The total classroom contact for this course will be 20 hours. For the course evaluation, students will be required to submit two essays (50% each of the final mark) of 500 words each regarding (1) the use of digital technologies on consumer analysis and (2) new consumer trends in globalized markets. Students can provide feedback to the lecturer at any time during the course, either in class or via email.

OBJECTIVES

The objectives of this course include:

(1) To examine consumer science procedures using novel digital technologies, including facial recognition, eye-tracking, and virtual/augmented reality environments

- (2) To analyze current globalized food trends in cross-cultural settings
- (3) To evaluate the use of artificial intelligence in marketing research

COURSE READINGS / ACADEMIC MATERIAL

COURSE READINGS include excerpts from:

- Torrico DD (2021). Novel techniques to measure the sensory, emotional, and physiological (Biometric) responses of consumers toward foods and Packaging. MDPI. ISBN 978-3-0365-2537-2.
- Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P., & Suman, R. (2022). Artificial intelligence (AI) a pplications for marketing: A literature-based study. International Journal of Intelligent Networks, 3, 119-132.

and other selected articles from:

- Cong L, Luan S, Young E, Mirosa M, Bremer P, Torrico DD. (2023). The application of biometric a pproaches in agri-food marketing: a systematic literature review. Foods, 12, 2982.
- Hutchings S, Dixit Y, Al-Sarayreh M, Torrico DD, Realini C, Jaeger S, Reis MM. (2023). A critical review of social media research in sensory-consumer science. Food Research International, 112494.
- Torrico DD, Sharma C, Dong W, Fuentes S, Gonzalez Viejo C, Dunshea FR. (2021). Virtual reality environments on the sensory acceptability and emotional responses of no-and full-sugar chocolate. LWT Food Science and Technology, 137, 110383.
- Torrico DD, Fuentes S, Gonzalez Viejo C, Ashman H, Dunshea FR. (2018). Cross-cultural effects of food product familiarity on sensory acceptability and non-invasive physiological responses of consumers. Food Research International, 115, 439-450.
- Torrico DD, Fuentes S, Gonzalez Viejo C, Ashman H, Gurr PA, Dunshea FR. (2018). Analysis of thermochromic label elements and colour transitions using sensory acceptability and eye tracking techniques. LWT Food Science and Technology 89, 475-481.