

Course Syllabus

1	Course title	Sensory Evaluation of Foods
2	Course number	0603410
3	Credit hours (theory, practical)	2, 1
	Contact hours (theory, practical)	2, 3
4	Prerequisites/corequisites	
5	Program title	Food Science and Technology
6	Program code	042
7	Awarding institution	The University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	4
11	Year of study and semester (s)	Spring/First semester
12	Final Qualification	BSc.
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	22/12/2019

16. Course Coordinator: Prof. Mohammed Ismael Saleh

Office numbers, office hours, phone numbers, and email addresses should be listed.

Office hours						
Day/Time	Sunday	Monday	Tuesday	Wednesday	Thursday	
Day						
Time	10:00 – 12:00	11:00-12:30	9:00 – 12:00	11:00-12:30		

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Office hours						
Day/Time	Sunday	Monday	Tuesday	Wednesday	Thursday	
Day						
Time	10:00 – 12:00	11:00-12:30	9:00 – 12:00	11:00-12:30		

18. Course Description:

This course will cover the importance of sensory evaluation of food in research and development as well as quality control purposes; the preparation and proper conditions needed for conducting the sensory evaluation tests. The different methods used in the sensory evaluation as well as the statistical analysis of the results will also be included. In the practical part of this course, sensory evaluation tests will be performed on selected local fresh and/or processed foods including some traditional foods.

19. Course aims and outcomes:

The aim of this course is to introduce the students to the proper conditions needed for conducting the sensory evaluation tests or what is called sensory evaluation protocol. The course also aims at training the students in the fields of recognition tests for taste, odor and aroma, additional sensation, threshold tests, difference, preference and descriptive sensory methods. The final objective is to train the students to apply the different statistical methods (ANOVA, special tables, and special computer programs) to the obtained sensory results.

Successful completion of the course should lead to the following outcomes:

A. Knowledge and Understanding: Student is expected to

- A1- Understand the proper conditions needed for conducting the sensory evaluation tests
- A2- Understand the recognition tests for taste, odor and aroma, additional sensation, threshold tests, difference, preference and descriptive sensory methods
- A3- Understand how to apply the different statistical methods (ANOVA, special tables, special computer programs) to the obtained sensory results.
- A4- Get familiar with the International standards for the sensory evaluation of cola products as a model system

B. Intellectual Analytical and Cognitive Skills: Student is expected to

- B1- Describe the food sensory evaluation protocol.
- B2- Develop a detailed understanding regarding the recognition tests for taste, odor and aroma, additional sensation, threshold tests, difference, preference and descriptive sensory methods
- B3- To be knowledgeable with the International standards for the sensory evaluation of cola products

C. Subject- Specific Skills: Students is expected to

- C1- Apply and analyze the food sensory evaluation protocol
- C2- Applicable for solving problems associated with food production by applying food sensory evaluation

D. Transferable Key Skills: Students is expected to

- D1- Gain basic knowledge related to the food sensory evaluation protocol
- D2- Know how to apply the different sensory evaluation method
- D3- To get familiar with the standards for the sensory evaluation of cola products

20. Topic Outline and Schedule:

Content	Reference	Week	ILO/s
Introduction to sensory evaluation		1	A1
Perception of sensory attributes (Chap 2)			
Difference testing techniques and selection of a panel (Chap 6.1 and 8.III)		2	A1, B1
Difference testing techniques and selection of a panel (Chap 6.1 and 8.III)			
Controlling conditions for a sensory test (Chap 3)		3	A3, B2
Attribute difference testing (Chap 6.2)		4	B1
Measuring a response and factors influencing response (Chap 4 and 5)		5	A2, A3, B
Determining threshold (Chap 7)		6	A3, C
Descriptive analysis: selection and training (Chap 8)		7	A2, B1

Consumer Testing (Chap 10)	8	B1
Relating instrumental to sensory data	9	B1, C
Statistical analysis of data (Chapter 11)	10	C
Statistical Designs (chap 11)	11	C1, C2
Advanced Statistical Techniques (Chap 12)	13-14	C1, C2
Designing a sensory evaluation program in the industry	15-16	A, B, C, D
Laboratories		
Application of paired comparison for evaluation of milk samples	1	A
Triangle Tests	2	A, B
Use of sequential testing in selecting judges	3	B1
Order of combining tea and milk	4	A3, B2
Determination of odor thresholds by force-choice ascending concentration series	5	A2, A3, B1, B2
Inversions in ranking	6	A3, B1, B2
Magnitude Estimation	7	C
Descriptive analysis of cola beverages	8	A4, B3
Quantitative descriptive analysis of cola beverages	9	A4, B3
Group projects experiments	10-15	A, B, C

21. Teaching Methods and Assignments:

The course will be structured in lectures, discussions, theoretical and practical exercises and excursions. The course comprises overviews, from general understanding to expert knowledge on key topics, and learning is based on lectures as well as independent learning through exercises, excursions and a Practical work. In the practical part of this course, the sensory evaluation tests mentioned above will be performed on selected local fresh and/or processed foods including some traditional foods.

22. Evaluation Methods and Course Requirements:

Class work will be presented. Exams, assignments and presentation evaluation will be graded for evaluation. Exams will be administered after completion of the course technical units; these unit exams will comprise both essay and problem-oriented questions. The final exam is comprehensive.

Laboratory Reports and Assignments

Each student will be asked to write a report about the sensory tests he will perform every week; these reports will be evaluated and returned back to students.

23. Course Policies:

Students and instructors each have an important role in maintaining a classroom environment optimal for learning, and are expected to treat each other with respect during class, using thoughtful dialogue, and keeping disruptive behaviours to a minimum. Class discussions are interactive and diverse opinions will be shared; please be thoughtful in sharing your perspectives and responses with one another. Other behaviours that can be disruptive are chatting and whispering during class, the use of electronic equipment, preparing to leave before class is over, and consistently arriving late to class. Please keep these disruptions to a minimum. Inappropriate behavior in the classroom may result in a request to leave the class and/or subject to penalty.

24. Required equipment: (Facilities, Tools, Labs, Training....)

Classroom facilities

25. References:

Learning Resources
Required text (s)
1. Meilgaard, M., Civille, G.V. and Carr, T.B. 1999. Sensory Evaluation Techniques. 3rd ed. CRC Press Boca Raton New York. ISBN 0-84930-276-5

Recommended references
1. Nas, T., Brockhoff, P.B. and Tomic, O. 2010. Statistics for Sensory and Consumer Science. Printed and bound in the United Kingdom by Antony Rowe Ltd, Chippenham, Wiltshire. ISBN (Hbk) 9780470518212
2. Lawless, H. T., and Heymann, H. 2010. Sensory Evaluation of Food Principles and Practices Second Edition. Springer New York Dordrecht Heidelberg London. ISBN 978-1-4419-6487-8 e-ISBN 978-1-4419-6488-5
3. Kemp, S.E., Hollowood, T. and Hort, J. 2009. Sensory Evaluation A practical handbook. Wiley-Blackwell. ISBN: 978-1-4051-6210-4

26. Additional information:

Name of Course Coordinator: **Prof. Mohammed Ismael Saleh** Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

