Module Course



UNIVERSITAS JEMBER FACULTY OF AGRICULTURAL TECHNOLOGY DEPARTMENT OF AGRICULTURAL PRODUCT TECHNOLOGY

KODE DOKUMEN

F1.03.05

COURSE

Module Course		
Name	Sensory Evaluation	
Kode	TPP 1503	
Credit (SKS)	3 SKS Face to Face; 1 SKS Practice	
Semester	5	

Person(s) Teaching

- Dr. Ir. Sih Yuwanti, M.P.
- Dr. Maria Belgis, STP., M.P.
- Nurud Diniyah, S.TP., M.P., PhD.
- Mama Listyawaiti, S.TP., M.P.

DESCRIPTION OF COURSE

This course teaches about sensory testing that can apply to the food industry, which explains the purpose and importance of sensory analysis, preparation of sensory evaluation starting from panellists, laboratories, and sample preparation. Several evaluation methods. Several sensory evaluation methods were studied, including different tests, affective tests and descriptive tests, as well as data analysis and interpretation. Students can apply sensory test methods that follow their goals and needs in research, quality control or product development.

LO – Progi	- Programme Learning Outcome			
No LO	Statement of Learning Outcome (LO)			
LO-4	Able to design food products and agricultural products based on local			
	agro-industry commodities			
LO-7	Able to evaluate chemical, microbiological, physical changes, technical,			
	functional properties and health functional properties of food and agricultural products			
Course Learning Outcome (CLO)				
No CLO	Statement of CLO			
CLO-1	Explain the principles of testing agricultural products			
CLO-2	Explain the characteristics of agricultural food ingredients			
CLO-3	Implement testing for physical quality, nutrition, microbiology, organoleptic,			
and nutritive functional properties of food products and agricultural pro				
SUB COUP	SUB COURSE LEARNING OUTCOME (Sub-CLO)			
No	Statement of Sub-CLO			
Sub-CLO				
1	Explain the definition, benefits, principles, and types of analysis in the food			
	sector			

2	Explain the requirements for sensory testing, selection, and training of panellists
3	Explaining threshold test and overall difference test
4	Explain the definition, benefits, principles and types of sensory analysis of differentiation, affective testing, and consumer acceptance in the food sector
5	Explain the definition, benefits, principles, and types of descriptive sensory analysis in the food sector
6	Describe the latest developments in sensory testing in the food sector
7	Describe the sensory characteristics (sensory attributes) of food and agricultural products
8	Implementing sensory quality testing, threshold test and overall difference test
9	Implementing sensory quality testing of differentiation, affective, and consumer acceptance of food products and agricultural products
10	Applying sensory quality testing descriptive test of food products and agricultural products

LEARNING TOPIC

- Introduction, sensory evaluation and objectives (MB)
- Sensory attributes and human senses (SY)
- Sensory evaluation requirements (SY)
- Selection and training of panellists (SY)
- Threshold (SY)
- Differentiation test 1 (duo trio, tree angle, double comparator) (SY)
- Differentiation test 2 (rank, rating) (ND)
- Application differentiator test (ND)
- Affection test 1 (ND)
- Affection test 2 (ND)
- Consumer test (ML)
- Descriptive tests and their application in the food industry (ML)
- Types and techniques of Descriptive Sensory Test (MB)
- Descriptive test statistical analysis (MB)
- Descriptive test statistical analysis (MB)
- Development of sensory test methods (MB)

MAIN REFERENCES

- 1. Meilgaard M, Civille GV, Carr BT. 2016. *Sensory Evaluation Techniques*. 5th ed.,Boca Raton (US): CRC Press.
- 2. Setyaningsih, D., Apriyantono, A., dan Sari, M.P. 2010. *Analisis Sensori Untuk Industri Pangan dan Agro*. Bogor: IPB Press.

ADDITIONAL REFERENCES

1. Maria Belgis, C. Hanny Wijaya, Anton Apriantono, Bram Kusbiantoro, Nancy Dewi Yuliana. 2016. Physicochemical differences and sensory profiling of six lai (Durio kutejensis) and four durian (Durio zibethinus) cultivars indigenous Indonesia. International Food Research Journal, (index Scopus) Vol 23 (4): 1466-1473.

- 2. Maria Belgis, C. Hanny Wijaya, Anton Apriantono, Bram Kusbiantoro, Nancy Dewi Yuliana. 2017. Volatiles and aroma characteristic of six lai (*Durio kutejensis*) and four durian (*Durio zibethinus*) cultivars from Indonesia. Scientia Horticulturae Journal (Elsevier-index Scopus) Vol 220:291-298.
- 3. Sharif M.K, Butt M.S, Sharif H.R, Nasir, M. 2017. Sensory Evaluation and Consumer Acceptability. University of Agriculture, Faisalabad, Pakistan.
- 4. Fiorentini, M, Kinchla, A.J, Nolden, A.A. 2020. Role of Sensory Evaluation in Consumer Acceptance of Plant-Based Meat Analogs and Meat Extenders: A Scoping Review. Foods. 9 (1334): 1-15
- 5. Carabante, K.M, Prinyawiwatkul, W. 2017. Data Analyses of a Multiple-samples Sensory Ranking Test and Its Duplicated Test: A Review. Journal of Sensory Studies. 1-13

PREREQUISITES COURSE (If any)

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TIMELINE

WEEK(s	Components	Person(s)
1	Introduction, sensory evaluation and objectives	Dr. Maria Belgis, STP., M.P.
2	Sensory attributes and human senses	Dr. Ir. Sih Yuwanti, M.P.
3	Sensory evaluation requirements	Dr. Ir. Sih Yuwanti, M.P.
4	Selection and training of panellists	Dr. Ir. Sih Yuwanti, M.P.
5	Threshold	Dr. Ir. Sih Yuwanti, M.P.
6	Differentiation test 1 (duo trio, tree angle, double comparator)	Dr. Ir. Sih Yuwanti, M.P.
7	Differentiation test 2	Nurud Diniyah, S.TP., M.P., PhD.
8	Application differentiator test	Nurud Diniyah, S.TP., M.P., PhD
9	Affection test 1	Nurud Diniyah, S.TP., M.P., PhD
10	Affection test 2	Nurud Diniyah, S.TP., M.P., PhD
11	Consumer test	Mama Listyawaiti, S.TP., M.P.
12	Descriptive tests and their application in the food industry	Mama Listyawaiti, S.TP., M.P.
13	Types and techniques of Descriptive Sensory Test	Dr. Maria Belgis, STP., M.P.
14	Descriptive test statistical analysis	Dr. Maria Belgis, STP., M.P.
15	Descriptive test statistical analysis	Dr. Maria Belgis, STP., M.P.

16	Development of sensory test methods	Dr. Maria Belgis, STP.,
		M.P.

Jember, October 2022

Chief of Department

Person(s) coordinator

Dr. Triana Lindriati, S.T., M.P NIP 3509205408680001 Dr. Maria Belgis, STP., M.P. NIP 6408046712780002