320224699 Processing Machinery and Equipment

Module Name	**Processing Machinery and Equipment**
Module Level, if applicable	Intermediate
Code if Applicable	320224699
Subtitle, if applicable	-
Courses, if applicable	320224699 Processing Machinery and Equipment
Semester(s) in which the module is taught	3rd
Person responsible for the module	Devi Dwi Siskawardani, S.TP., M.Sc.
Lecturer	Devi Dwi Siskawardani, S.TP., M.Sc.
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Departement of Food Technology, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, project
Workload	● Lecture: 3 sks X 50 minutes X 16 weeks ● Project: 3 sks X 60 minutes X 16 weeks ● Independent learning: 3 sks X 60 minutes X 16 week
Credit points	3 SKS X 1.5 = 4.5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	-
Module Objectives (Intended learning outcomes)	**Cognitive :** Able to know and apply the principles of food science (food chemistry and analysis, microbiology, food safety, food engineering and processing, food biochemistry, nutrition and health, and applied food science) in an integrated manner on an industrial scale to produce safe and quality food. **Psychomotor :** Able to communicate orally and in writing related to technical and non-technical aspects. **Affective :** Able to think critically and analytically, solve problems, be responsible for his work independently, and make appropriate decisions based on reliable information
Module Content	This course presents material on the processing process, along with the main analytical equipment, and is followed by an explanation of the functions of the tool parts, working principles, working methods and specifications of various food processing machines.

Study and examination requirements and forms of examination	**Cognitive:** Midterm exam, Final exam, Quizzes, Assignments **Affective:** Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.
Media employed	Classical teaching tools with white board and power point presentation

Recommended Literature	For Class
	    A. Compulsory
	1. Cheng, L.M. 1992. Food Machinery. Ellis Horwood. England.
	2. Warkoyo, dan Wachid, M. 2008. Mesin dan Peralatan. UMM-Malang
	3. Riaz, M.N. 2000. Extruders in Food Applications. CRC Press. USA.
	    B. Option
	1. Videos from Youtube related to the production process, sanitation, and machine tools in the food processing industry
	2. National-international journals related to applications such as: Journal of Research related to Heat exchangers, and Non-thermal Processing, Separators, Extruders, and Evaporators, Drying, Refrigeration and Freezing Machines, Mixing, Emulsification, and Homogenization Machinery and Equipment, Processes and Machinery in the Food Processing Industry

Date of Last Amendment	22nd Agustus 2022