

Module Name	Basic Physics
Module Level, if applicable	Beginner
Code if Applicable	220220641
Subtitle, if applicable	-
Courses, if applicable	220220641 Basic Physics
Semester(s) in which the module is taught	1 st
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 Food Technology Department
Type of teaching	Lecture, project
Workload	<ul style="list-style-type: none"> ● Lecture: 2 sks X 50 minutes X 16 weeks ● Project: 2 sks X 60 minutes X 16 weeks ● Independent learning: 2 sks X 60 minutes X 16 week
Credit points	2 SKS X 1.5 = 3 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	-
Module Objectives (Intended learning outcomes)	<p>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.</p> <p>Psychomotor : Able to communicate orally and in writing related to technical and non-technical aspects.</p> <p>Affective : Able to think critically and analytically, solve problems, be responsible for his work independently, and make appropriate decisions based on reliable information</p>
Module Content	<p>This course is an integration between the application of physical principles related to food processing. In addition, the physical properties of food are often discussed in terms of texture, viscosity, appearance, density, and Stokes' Law. And also in processing techniques also often apply drying, cooling, freezing, extrusion, evaporation, crystallization, mixing, energy measurement, fluid principles and heat transfer.</p>

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. Ling SJ, Sanny J., and Moebis W. 2016. University Physics Volume 1. OpenStax. USA. 2. Young HD., and Freedman RA. 2002. Fisika Universitas Jilid 1 (Edisi Terjemahan). Erlangga. Jakarta. 3. Bueche FJ., and Hecht E. 2006. Fisika Universitas Edisi ke-10 (Edisi Terjemahan). Erlangga. Jakarta. 4. Holman, J.P., 1993. Perpindahan Kalor. (Edisi Terjemahan). Penerbit Erlangga. Jakarta. 5. Incropera, F.P. and D.P de Win, 1990. Fundamental of Heat and Mass Transfer. John Wiley & Sons. New York. B. Option 1.Video from Youtube related to the process of applying physics in the food processing industry 2. National-international journals related to the application of physics in food technology
Date of Last Amendment	20 th January 2022