Module Name	Food Toxicology
Module Level, if applicable	Advanced
Code if Applicable	420226097
Subtitle, if applicable	-
Courses, if applicable	420226097 Food Toxicology
Semester(s) in which the	6th
module is taught	0m
Person responsible for the module	Hanif Alamudin Manshur, S.Gz., M.Si.
Lecturer	Hanif Alamudin Manshur, S.Gz., M.Si.
Language	Indonesian
Relation to curriculum	Elective Course for undergraduate program in Department of Food Technology, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, Project
Workload	<ul> <li>Lecture: 2 SKS X 50 minutes X 16 weeks</li> <li>Project: 2 SKS X 60 minutes X 16 weeks</li> <li>Independent learning: 2 sks X 60 minutes X 16 weeks</li> </ul>
Credit points	2 SKS X 1.5 = 3 ECTS
Requirements according to the examination	1. Registered in this course
regulations	2. Minimum 80% attendance in this course
Recommended prerequisites	Physiology and Metabolism of Nutrients, Food Nutrition Evaluation
Module Objectives (Intended learning outcomes)	<ul> <li>On successful completion of this course, student should be able to :</li> <li>Understand the chemical and biological principles that determine toxicity and, by presenting typical examples of the toxic substances found in foods.</li> <li>Explain the properties, modes of action, and analysis methods of food toxicants</li> </ul>

Module Content	Food toxicology is an advanced elective course. It is concerned with assessing the injurious effects on living systems of chemicals present in foods. It also study the biochemical reactions that occur in toxic compounds that enter the human body at the stages of digestion,
	absorption, distribution, biotransformation, and accumulation within the body. The whole process is needed to know the body's defense system in eliminating toxic compounds. The impact on health that occurs during the metabolic process of toxic compounds is also discussed in detail and includes acute and chronic toxic doses.
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	<ol> <li>Omaye, S.T. 2014. Introduction to food toxicology. Pesticide, Veterinary and Other Residues in Food. 2004 : 1–26. doi: 10.1533/9781855739109.1</li> <li>Jose V. Tarazona, Maria Chiara Astuto, Maria Bastaki, Irene Cattaneo, Yann Devos, Jean-Lou C.M. Dorne, George E.N. Kass, A.K. Djien Liem, 2024. Food safety and toxicology, Editor(s): Philip Wexler, Encyclopedia of Toxicology (Fourth Edition), Academic Press, Pages 781-791, ISBN 9780323854344</li> <li>Shibamoto T. and Bjeldanes L. F. 1993. Introduction to Food Toxicology. Academic Press, ISBN 9780080925776.</li> </ol>
Date of last Amendment	20 <sup>th</sup> December 2022