

# Strengthening Legal Education in Malaysia: Advocating for the Inclusion of Food Safety and Food Security Law in the Curriculum

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## ABSTRACT

The integration of food safety and food security law into the Malaysian legal education curriculum is vital in addressing the complexities of legal issues arising from these domains. The rapid pace of global trade and advancements in food production technologies have heightened the need for legal professionals to understand the regulatory frameworks governing food safety and food security, both domestically and internationally. As Malaysia advances efforts to strengthen its food supply chain and simultaneously safeguard public health, legal education must evolve accordingly. This study examines the awareness, interest, and perceived importance of food safety and food security law among Bachelor of Laws (LL.B) students at the Faculty of Law, Universiti Teknologi MARA (UiTMLaw). Based on the close-ended online survey, the findings reveal limited student awareness, particularly regarding the regulatory frameworks for food safety and food security. The data underscore the urgent need to introduce a specialised course on food safety and food security, either as an elective or a core course in the LL.B curriculum. It is the best-equipped future legal practitioners to respond to national and global food-related legal challenges. This study further proposed essential syllabus components for the course, ensuring a comprehensive understanding of food law in practice.

**Keywords:** food safety, food security, legal education, LL.B curriculum

## INTRODUCTION

Law is not an autonomous body of knowledge. It is an inherently interdisciplinary field that closely interfaces with other disciplines, such as economics, science, technology, psychology, history, and philosophy (Moolman, 2023). It encroaches on the private lives of individuals, such as on health and education. Law also operates as an agent that defines what is permissible and forbidden. This is done by establishing the boundaries of acceptable behaviour and setting rules of conduct. Furthermore, society and institutions constantly evolve, resulting in the expansion of knowledge in various disciplines and practices. Such expansion has also given rise to new areas of legal expertise and significantly transformed the legal landscape (Scott, 2004). Hence, it is pivotal to regularly review and revise the law curriculum offered in universities.

The review process ensures the curriculum offered remains relevant and responsive by phasing out outdated courses and incorporating new ones (Haicong, 2009). According to Johnston and others (2014), the timely review enables students to follow the curriculum that addresses emerging societal needs and challenges, as preparation for future employment. One of the emerging legal fields is food safety and food security law. Food is the basis for sustaining a healthy life, and it is directly connected with a nation's growth. A healthy living population will contribute flawlessly to achieving national growth (Shafi et al., 2024).

In an increasingly globalised and industrialised world, the food system has grown into a complex network involving production, processing, distribution, and consumption stages, all of which are governed by a range of actors, from multinational corporations to small-scale farmers (Fontefrancesco, 2025). This complexity not only offers opportunities for economic development and technological innovation but also introduces

significant risks to public safety and health, environmental sustainability, and social equity (Varzakas & Antoniadou, 2024). These challenges underscore the critical role of law as a regulatory instrument for managing associated risks and ensuring accountability across the food system. Food also traverses vast supply chains and multiple jurisdictions, subjected to national and international regulatory frameworks. Hence, it is essential to introduce a course on food safety and food security law into the LL.B curriculum. It is to produce law graduates who can tackle food justice, sustainability, and health equity aligned with societal needs.

This paper examines students' awareness, interest, and perceived importance of incorporating a food safety and food security law course into the LL.B curriculum at the Faculty of Law, Universiti Teknologi MARA (UiTM Law). The findings offer valuable insights into the feasibility of introducing such a course to better prepare future legal professionals for evolving challenges in food regulation. The paper is structured as follows. Following the introduction, this paper analyses the growing need for a specialised course on food safety and food security law, highlighting its relevance in equipping law graduates with essential legal knowledge in this domain. The next part details the research methodology employed, followed by an analysis of survey findings. The fourth part proposes a curriculum framework for the course by identifying the learning outcomes and key components for the syllabus. This study ends with a conclusion.

### **Emerging Imperatives In Food Safety And Food Security Law**

Globally, food safety and food security issues have become increasingly concerning. It is critical to many of the global sustainable development goals (SDGs) as safe food is a primary determinant for zero hunger, good health, human rights and economic growth. In Malaysia, there is a notable rise in reported incidents of foodborne diseases (FBD) and food fraud. According to the National Poison Centre (NPC), food poisoning cases caused by harmful levels of bacteria, viruses, and parasites increased from 2,913 in 2022 to 3,153 in 2023 (New Straits Times, 2024). Meanwhile, in 2024, around 1,300 cases were reported by June (Radhi, 2024). Such incidents often result in serious health consequences, including diarrhoea, abdominal pain, fever, and vomiting. In severe cases, it could cause morbidity and mortality (Roshed, 2024).

Food fraud cases in Malaysia have been a growing concern. A study by Sinclair and others (2024) indicates that consumers in Malaysia were significantly worried about food fraud compared to other ASEAN countries. A study indicates that 50% of the food consumed every day is adulterated either intentionally or unintentionally (Koul et al., 2020). Most of the food fraud cases involve forged halal logos, unethical slaughterhouse practices, counterfeit food and beverages, mislabelling, and adulterated food products (Sinclair et al., 2024). A prevalent issue is on mislabelling of meat products, with a study finding that 78.3% of samples were mislabelled, particularly in beef and poultry products. The factors that contributed to the upward trend of foodborne illness and food fraud are non-compliance with the standard of food hygiene and food handling as prescribed by the law (Lee et al., 2023; Rajendran, 2024). The growing threat of foodborne illness and food fraud is not only a public health issue but also a legal imperative, as it involves the right of humans to have access to safe, nutritious, healthy food and compensation for the losses and expenses incurred.

In the United States, there are legal firms and legal practitioners specialising in food safety. Their responsibility is to represent victims of food safety cases, such as food poisoning or food injury litigation and advise on food businesses about regulatory compliance (Kendrick, 2025). The legal practitioners are not only experts on the food safety law but also equipped with the knowledge of science, essential for cases involving public safety and health. On the other hand, in Malaysia, litigation related to food safety cases, such as food poisoning, is uncommon. The searches on the Lexis Nexis database using the advanced search of "food poisoning" indicate the absence of decided cases on food poisoning litigation in Malaysia. This highlights the need to expose law students to the legal dimensions of food safety and the potential for litigation in this area. The victim should be represented to claim their rights and seek redress effectively.

Next is the complexity of the food system. The food safety system is a complex and interconnected network involving a diverse range of stakeholders, from multinational corporations to small-scale farmers. All of whom play critical roles across the stages of production, processing, distribution, and consumption. A food product may be manufactured in one country using raw materials sourced from multiple countries and subsequently integrated into the global supply chain for consumption. For instance, imported vegetables contaminated with

the chemical fipronil (Bernama, 2018) or infested with pests (The Straits Times, 2024), and powdered milk contaminated with melamine (Gossner, 2009), could cause serious health effects to domestic consumers. Therefore, food safety is not only a domestic concern but also a significant international legal issue.

Food safety law is also interconnected with international trade law. The regulation of food safety plays a significant role in facilitating or restricting the distribution of food products across borders. International trade agreements under the World Trade Organisation (WTO), i.e., the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Technical Barriers to Trade (TBT) Agreement, require member states to align their food safety laws with international standards, notably those established by bodies such as the CAC. Non-compliance with the regulatory measures stipulated in SPS and TBT may paradoxically create non-tariff barriers to the global food market. (Tibebu et al., 2024). Food safety regulations and any resulting trade interruptions can be costly to countries and affected industries or firms (Buzby & Mitchell, 2003). Malaysia is becoming increasingly dependent upon internationally traded food. Therefore, law students should be equipped with legal knowledge on international trade law related to food safety.

Furthermore, there is a pressing demand for food supply as the global population continues to increase. To address this growing demand, food manufacturers are progressively integrating emerging technologies aimed at enhancing food production. Emerging technologies such as nanotechnology, biotechnology, cellular agriculture, nonthermal processing, and 3D food printing have become pivotal in transforming conventional agricultural practices and significantly boosting food output. While these advancements hold significant promise, they also present potential safety and health risks that must be carefully evaluated and managed. For instance, toxicological studies on oral exposure to nanomaterials present in food products have revealed significant safety and health implications for humans (Qamar et al., 2024; Agron & Kim, 2024; Douglas et al., 2025).

Consequently, the current legal frameworks must be updated and aligned with technological advancements in the food industry. It is aimed to effectively address the potential risks posed by emerging technologies and ensure adequate protection on consumer health and safety. For instance, the usage of biotechnology on genetically modified organisms (GMOs) in food products is surrounded by controversy and safety concerns. This has led to the formulation of the Cartagena Protocol on Biosafety, i.e., the international instrument to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology. Domestically, the Biosafety Act 2007 [Act 678] was enacted to regulate activities related to GMOs, including food production. However, the Food Act 1985 and Food Regulations 1983 still lack specific provisions addressing innovations such as nanotechnology, nanomaterials, cellular agriculture such as cell-cultured meat, or 3D food printing. This regulatory gap underscores the critical need for legal practitioners to actively engage in the reform and modernisation of food safety laws in response to this scientific uncertainty on safety and health risks.

This paper also analyses the local and foreign universities that offer courses related to food safety and food security law. In Malaysia, there are only seven public universities that offer the LL.B program, namely Universiti Teknologi MARA (UiTM), Universiti Kebangsaan Malaysia (UKM), Universiti Malaya (UM), International Islamic University Malaysia (IIUM), Universiti Utara Malaysia (UUM), Universiti Sultan Zainal Abidin (UNISZA), and Universiti Islam Sains Malaysia (USIM). The analysis of the plan of study for the LL.B program in these universities indicates that the food-related laws, such as food safety and food security laws, are currently not included in the LL.B curriculum.

At the Faculty of Law, Universiti Teknologi MARA (UiTM), food law is not part of the academic program. Conversely, a course titled Halal and Food Law (FST735) is available exclusively within the Master of Science in Food Science and Technology (AS746) program, offered by the Faculty of Applied Sciences at UiTM. Reference is made to the Bachelor of Laws program in other countries as listed in Table 1. Table 1 provides the lists of universities in Australia, the United Kingdom, and the United States that offer courses related to food safety and food security law.

Table 1: List of Universities in Australia, the United Kingdom and the United States with Food-Related Courses

Country	University	Course	References
Australia	University of Melbourne	Food Law and Policy (LAWS10005)	University of Melbourne. (n.d.). Handbook for Food Law and Policy (LAWS10005). <a href="https://handbook.unimelb.edu.au/search?query=food+law&amp;types%5B%5D=subject&amp;year=2021&amp;subject_level_type%5B%5D=all&amp;study_periods%5B%5D=all&amp;area_of_study%5B%5D=all&amp;org_unit%5B%5D=all&amp;campus_and_attendance_mode%5B%5D=all&amp;page=1&amp;sort=_score%7Cdesc">https://handbook.unimelb.edu.au/search?query=food+law&amp;types%5B%5D=subject&amp;year=2021&amp;subject_level_type%5B%5D=all&amp;study_periods%5B%5D=all&amp;area_of_study%5B%5D=all&amp;org_unit%5B%5D=all&amp;campus_and_attendance_mode%5B%5D=all&amp;page=1&amp;sort=_score%7Cdesc</a> .
	University of Sydney	Law, Business and Healthy Lifestyles (LAWS6848)	University of Sydney. (n.d.). The University of Sydney Handbooks. <a href="https://rp-handbooks.sydney.edu.au/handbooks/archive/2020/law/undergraduate/electivesp1descriptions.shtml.html?utm_source=chatgpt.com">https://rp-handbooks.sydney.edu.au/handbooks/archive/2020/law/undergraduate/electivesp1descriptions.shtml.html?utm_source=chatgpt.com</a> .
	University of New South Wales	Food Law (JURD7716)	University of New South Wales. (n.d.). Handbook. <a href="https://www.handbook.unsw.edu.au/postgraduate/courses/2025/jurd7716">https://www.handbook.unsw.edu.au/postgraduate/courses/2025/jurd7716</a> .
	University of New England	Global Food Security & Policy (LAW397)	University of New England. (n.d.). Law School Unit Offerings. <a href="https://www.une.edu.au/about-une/faculty-of-science-agriculture-business-and-law/school-of-law/future-students/law-unit-offerings">https://www.une.edu.au/about-une/faculty-of-science-agriculture-business-and-law/school-of-law/future-students/law-unit-offerings</a> .
	Griffith University	Food Law and Policy (5182 Law)	Griffith University. (n.d.). Food Law and Policy. <a href="https://www.griffith.edu.au/study/courses/food-law-and-policy-5182LAW?location=dom">https://www.griffith.edu.au/study/courses/food-law-and-policy-5182LAW?location=dom</a> .
United Kingdom	University of Aberdeen	Food Law (LS553J)	University of Aberdeen. (n.d.) Catalogue of Courses. <a href="https://www.abdn.ac.uk/registry/courses/course/LS553J/2021?utm_source">https://www.abdn.ac.uk/registry/courses/course/LS553J/2021?utm_source</a>
	Liverpool John Moores University	Food Law	Liverpool John Moores University. (n.d.). LLM in Food Law. <a href="https://informaconnect.com/llm-food-law/food-law-llm/">https://informaconnect.com/llm-food-law/food-law-llm/</a>
United States	Harvard University	Food Law and Policy	Harvard Law School. (n.d.). Courses: Food Law and Policy. <a href="https://hls.harvard.edu/courses/food-law-and-policy-6/">https://hls.harvard.edu/courses/food-law-and-policy-6/</a>
	Yale University	Advanced Climate, Animals, Food, and Environment Law and Policy Lab (21767)/Food and Drug Administration Law and Policy (21936)	University of Yale. (n.d.). Food and Drug Administration Law and Policy <a href="https://courses.law.yale.edu/CourseDetailPage?TermCode=202501&amp;CRN=21936">https://courses.law.yale.edu/CourseDetailPage?TermCode=202501&amp;CRN=21936</a>
	Stanford	Food Law and	Stanford University. (n.d.). Food Law and Policy.

	University	Policy (7024)	<a href="https://law.stanford.edu/courses/food-law-and-policy/">https://law.stanford.edu/courses/food-law-and-policy/</a>
	Boston University	Food Law (LWJD680)	Boston University. (n.d.). Food Law. <a href="https://www.bu.edu/law/courses/lawjd680/">https://www.bu.edu/law/courses/lawjd680/</a>
	University of Vermont	Introduction to Agriculture and Food Law and Policy (ENV5108)	Vermont University. (n.d.). Program in Food and Agricultural Law. <a href="https://www.vermontlaw.edu/academics/degrees/llm#llm-program-in-food-and-agriculture-law">https://www.vermontlaw.edu/academics/degrees/llm#llm-program-in-food-and-agriculture-law</a>
	University of Minnesota	Food Law (6602)	University of Minnesota. (n.d.). Food Law. <a href="https://law.umn.edu/course/6602/spring-2023/food-law/graham-david">https://law.umn.edu/course/6602/spring-2023/food-law/graham-david</a>
	Michigan State University	Global Food Law	Michigan State University. (n.d.). Academics: Global Food Law (The Curriculum). <a href="https://www.law.msu.edu/programs/global-food-law/current-students/academics.html">https://www.law.msu.edu/programs/global-food-law/current-students/academics.html</a>
	University of California, Los Angeles (UCLA)	Food Law and Policy (LAW508)	University of California, Los Angeles. (n.d.) Food Law and Policy. <a href="https://law.ucla.edu/academics/curriculum/food-law-and-policy">https://law.ucla.edu/academics/curriculum/food-law-and-policy</a>

Source: Authors interpretation

## METHODOLOGY

This study is designed as a descriptive study that utilises a quantitative research methodology of a survey. Data on the students' awareness, interest, and perceived importance of food safety and food security law courses were collected using a self-constructed questionnaire to align with the study's objectives. The questions were developed based on insights from literature as well as professional experiences. A pilot study involving 10 respondents was conducted to ensure the validity and reliability of the survey questions. The data of the pilot study were collected face-to-face among law students in the Faculty of Law, Universiti Teknologi MARA. The survey was distributed online via Google Form to LL.B students at the Faculty of Law, Universiti Teknologi MARA, using non-probability sampling, which is a convenience sampling technique. The data was collected from April 2025 to May 2025 with a total of 145 responses.

## RESULT AND DISCUSSION

Table 2: Respondents' Demography

Respondent's demography	Total
Gender:	
Male	29
Female	116
Age:	



19 and below	2
20 - 25	140
26 - 30	1
31 and above	2
Current semester:	
Semester 1	4
Semester 2	16
Semester 3	32
Semester 4	39
Semester 5	6
Semester 6	19
Semester 7	15
Semester 8	14
Have you taken any elective or core courses related to environmental law, public health law, or agricultural law?	
Yes	87
No	58

Source: Authors interpretation

Table 1 reports the respondents' demographics. A total of 145 responses were collected from the distributed questionnaire. The majority of respondents are female students, with 116 responses. Meanwhile, 140 of the respondents are aged between 20 – 25 years old. The highest concentration of respondents is in Semester 3 (32 respondents) and Semester 4 (39 respondents). The duration of the LL.B program at UiTM is four years with eight semesters. Within the eight semesters, students must enrol for university courses, core courses, and elective courses. Courses related to environmental law and public health law, i.e., Environmental Law (LAW573) and Law Relating to Healthcare (LAW570), are currently offered as elective courses. Meanwhile, 87 of the respondents reported not having enrolled in either of these courses. This indicates a low level of student engagement with elective courses that address critical issues concerning human health, environmental protection, and public safety.

### **Awareness and Knowledge on Food Safety and Food Security**

In identifying the awareness and knowledge of the importance of food safety and food security laws, the respondents were asked five questions with a 5-point Likert scale. The five points consist of five answer options:

1 – Not at all familiar

2 – Slightly familiar

3 – Neutral

4 – Familiar

5 – Very familiar

Table 3: Awareness and Knowledge on Food Safety and Food Security Law

Questions	Not at all familiar	Slightly familiar	Neutral	Familiar	Very Familiar
How familiar are you with the concept of food safety?	6.9% (n=10)	24.1% (n=35)	37.9% (n=55)	26.9% (n=39)	4.1% (n=6)
How familiar are you with the concept of food security?	9% (n=13)	24.8% (n=36)	43.3% (n=63)	20% (n=29)	2.8% (n=4)
How familiar are you with the Food Safety Laws in Malaysia?	23.4% (n=34)	44.8% (n=65)	24.1% (n=35)	7.6% (n=11)	0% (n=0)
How familiar are you with the Food Security Laws in Malaysia?	27.6% (n=40)	38.6% (n=56)	27.6% (n=40)	6.2% (n=9)	0% (n=0)
How familiar are you with the International Food Law and Policy?	32.4% (n=47)	35.9% (n=52)	27.6% (n=40)	4.1% (n=6)	0% (n=0)

Source: Authors interpretation

Table 3 indicates that only 4.1% (6) of respondents reported being very familiar with the concept of food safety, while 26.9% (39) identified themselves as familiar with the concept. In contrast, a significant majority, i.e., 68.0% of respondents (100), demonstrated limited knowledge or uncertainty, indicating that they were unable to determine their level of familiarity with the concept of food safety. As for food security, only 2.8% (4) of the respondents are very familiar with the concept of food security, and 20% (29) are familiar. The result also indicates a lack of strong familiarity with the concept of food security, with 77.2%.

In relation to the familiarity of laws, a substantial proportion of respondents, 68.2% (99) is reported low familiarity with food safety laws in Malaysia, while 27.6% (40) expressed uncertainty regarding their level of understanding. Only a small minority, 7.6% (11), indicated that they were familiar with the relevant laws. Likewise, 66.3% (96) of respondents were either not familiar or only slightly familiar with food security laws in Malaysia, with 27.6% (40) again indicating indecisiveness. Regarding familiarity with international food law and policy, 68.3% (99) acknowledged a lack of familiarity, and 27.6% (40) were uncertain about their level of knowledge. Overall, the results reveal a consistent trend of limited knowledge and high uncertainty across all areas. This highlights a critical knowledge gap among the respondents on food safety and food security law.

### Perception and Attitude on Food Safety and Food Security in Legal Education

To explore the perception and attitude among LL.B students on the integration of food safety and food security law into legal education, four questions were directed to the respondents, using a five-point Likert scale (1 = *Strongly disagree*, 5 = *Strongly agree*). Table 2 reports the findings of respondents' perception and attitude toward incorporating food safety and security topics into legal studies and curriculum.

Table 4: Perceptions and Attitudes on Food Safety and Food Security in Legal Education

Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Do you think food safety and food security issues are relevant to legal studies?	0.0% (n=0)	1.4% (n=2)	18.6% (n=27)	44.1% (n=64)	35.9% (n=52)
Do you think food safety and food security law is a crucial aspect of legal education?	0.0% (n=0)	4.8% (n=7)	47.6% (n=69)	31% (n=45)	31% (n=45)
Do you think the food safety and food security law needs to be included in the LL.B curriculum?	0.7% (n=1)	7.6% (n=11)	23.4% (n=34)	39.3% (n=57)	29% (n=42)
Do you think food law-related subjects would enhance the prospects in your legal career?	2.1% (n=3)	7.6% (n=11)	25.5% (n=37)	34.5% (n=50)	30.3% (n=44)

Source: Authors interpretation

Table 3 illustrates a strong majority of respondents who 35.9% (52) strongly agreed and 44.1% (64) agreed that food safety and food security laws are relevant to legal studies. Similarly, there is substantial support (62%) for the view that food safety and food security represent a crucial component of legal education. However, nearly half of the respondents (47.6%) selected the neutral option, indicating either uncertainty or a need for increased exposure to this area of law.

Furthermore, 68.3% of respondents expressed support for incorporating food safety and security law into the LL.B. curriculum, with 29% (42) strongly agree and 39.3% (57) agree. Only 23.4% remained neutral on this inclusion. Lastly, a majority of respondents (64.8%), comprising 30.3% (44) who strongly agreed and 34.5% (50) who agreed, that food safety and security law is a potentially valuable specialisation or complementary area for their professional development. A smaller proportion of respondents were either uncertain (25.5%) or disagreed (9.7%) with the notion that such courses could enhance their legal career prospects.

The data in Table 2 demonstrates a positive attitude and strong support for the integration of food safety and food security law in legal education and LL.B curriculum. There is a high level of agreement on its importance and potential career benefits. Therefore, based on the findings, it is recommended that a course on food safety and food security law be introduced into the LL.B curriculum, either as a core or elective offering.

## FINDINGS AND RECOMMENDATIONS

The growing global population places increasing pressure on food systems, intensifying the challenges of ensuring both food safety and food security sustainably and equitably (World Health Organisation, 2023). Law plays a vital role in addressing these challenges by regulating food production, distribution, consumption, and sustainability. However, legal frameworks must be continuously reviewed and updated to respond effectively to emerging risks, technological advancements, and sustainability goals to support resilient and safe food systems.

Unfortunately, the results show that 68.0% are not familiar with the food safety concept, and 77.2% lack strong familiarity with food security. Most importantly, the results indicate that the majority of LL.B students are not familiar with the relevant laws governing food safety and food security. Hence, this study contended that LL.B students in the Faculty of Law, UiTM, is not prepared to navigate and shape legal frameworks that ensure safe, sufficient, and sustainable food systems. Lack of preparation will also hinder these future lawyers from advising clients, litigating disputes, or contributing to policymaking in these areas. Additionally, since other



law faculties in public universities in Malaysia similarly do not incorporate courses on food safety and food security in their curriculum, this study contends that students in these institutions are likewise experiencing limited familiarity with the laws in these areas.

The course for food safety and food security law is designed with the following learning goals in mind, to enable students to learn about the range of different laws and regulations in Malaysia and around the world that impact food systems through analysis of how law and regulations addresses conflicts and problems concerning food safety and food security. In formulating the course learning outcomes (CLO) for this course, this study takes into consideration the Malaysian Qualifying Framework (MQF) 2024, particularly on the Value-Based Learning (VBE) and Education Sustainable Development (ESD). The VBE aims to strengthen moral and ethical values by nurturing character, personality, attitude and behaviour based on humanistic, societal and communal values. While ESD focuses on the acquisition of knowledge, skills, values and empowerment for learners of all ages to address various interconnected global challenges and actively engage in actions promoting sustainable development (Malaysian Qualifying Framework, 2024).

This study proposed that this course should consist of four CLOs. The proposed CLOs are as follows. At the end of the course students should be able to (i) recognise the stakeholders responsible for the food safety and food security within the food system (ii) identify the laws and regulations in Malaysia as well as international instruments on food safety and food security, (iii) propose sustainable legal solutions on issues relating to food safety and food security, (iv) adhere to ethical and legal standards in evaluating the limitations in existing regulatory framework on food safety and food security and proposed a strategic reform through collaborative decision making. The third and fourth CLOs embedded the VBE and ESD elements by incorporating the ethical value in proposing a legal solution that supports sustainable development and promotes collaborative effort in decision-making. Table 5 illustrates the proposed course content that is divided into eight components that could be delivered over 14 weeks.

Table 5: Proposed Course Content for Food Safety and Food Security Law

No	Topic	Subtopic
1	Introduction to Food Safety and Food Security	<ul style="list-style-type: none"> <li>▪ The right to food (Human Rights Perspective)</li> <li>▪ The concept of food safety and food security</li> <li>▪ Stakeholders in the food chain system</li> </ul>
2	Emerging and Controversial Technologies in Food Production	<ul style="list-style-type: none"> <li>▪ Nanotechnology</li> <li>▪ Biotechnology (Genetically Modified Organism)</li> <li>▪ Cellular agriculture</li> <li>▪ 3D food printing</li> </ul>
3	Safety and Health Risks	<ul style="list-style-type: none"> <li>▪ Good health and well-being</li> <li>▪ Foodborne disease</li> <li>▪ Food fraud</li> <li>▪ Scientific uncertainty of safety and health risks</li> <li>▪ Legal liability (tort and contract law on foodborne illnesses)</li> </ul>
4	Environment and Food	<ul style="list-style-type: none"> <li>▪ Environmental impacts of food production</li> <li>▪ Animal Welfare</li> <li>▪ Responsible and sustainable food production</li> </ul>

5	Theories on Food Safety and Food Security	<ul style="list-style-type: none"> <li>▪ Human Rights Theory</li> <li>▪ Food Regime Theory</li> <li>▪ The Social Justice Theory</li> <li>▪ Precautionary Principle</li> <li>▪ Consumer Protection Theories</li> </ul>
6	Regulatory Framework in Malaysia: National Policies and Legislation	<ul style="list-style-type: none"> <li>▪ National Agrofood Policy</li> <li>▪ National Food Security Policy Action Plan 2021-2025</li> <li>▪ Food Act 1983 [Act 281]</li> <li>▪ Food Regulations 1985</li> <li>▪ Federal Agriculture Marketing Authority Act 1965 [Act 141]</li> <li>▪ Control of Pesticides Act 1974 [Act 149]</li> <li>▪ Fisheries Act 1985</li> <li>▪ Animal Act 1953 (Revised 2006) &amp; Animals (Control of Slaughter) Rules 2009</li> <li>▪ Malaysian Quarantine and Inspection Services Act 2011 [Act 728]</li> <li>▪ Biosafety Act 2007 [Act 678]</li> </ul>
7	Malaysian Food Safety Enforcement	<ul style="list-style-type: none"> <li>▪ Ministry of Agriculture and Food Security</li> <li>▪ Ministry of Health</li> <li>▪ Malaysian Quarantine and Inspection Services</li> <li>▪ Local Authorities</li> </ul>
8	Regulatory Framework: International	<ul style="list-style-type: none"> <li>▪ Food and Agriculture Organisation (FAO)</li> <li>▪ Codex Alimentarius Commission (CAC)</li> <li>▪ World Trade Organisation (SPS Agreement, TBT Agreement)</li> </ul>
9	ASEAN Food Safety Regulatory Framework	<ul style="list-style-type: none"> <li>▪ ASEAN Risk Assessment Centre for Food Safety</li> <li>▪ ASEAN Committee on Sanitary and Phytosanitary Measures</li> <li>▪ ASEAN Food Safety Network</li> <li>▪ ASEAN Expert Group on Food Safety</li> </ul>
10	Institutional Framework for Food Safety	<ul style="list-style-type: none"> <li>▪ Halal Certification</li> <li>▪ Hazard Analysis Critical Control Point (HACCP)</li> <li>▪ ISO</li> </ul>

Source: Authors interpretation

The first part of the syllabus is the introduction to the concept of food safety and food security. Students need to have knowledge and understanding of the concept of food safety and food security for them to acknowledge

the crucial roles of the regulatory framework in these areas. The second part is on the emerging and controversial technologies in food production. Legal students should be equipped with basic knowledge of food technologies. As explained earlier, food producers are engaging with various novel and emerging technologies, which is controversial in strengthening food security. Safety and health risks posed by these technologies could give rise to legal liability.

The third component is on the environmental aspect of food production. Strengthening food security often necessitates increased food production, which, if not managed sustainably, can lead to adverse environmental impacts and animal mistreatment. Students also must be exposed to the jurisprudence related to food safety and food security. Theories relevant to food safety and food security are pivotal to justify any possible legal reform to the current regulatory framework. Finally, the most pertinent component of the regulatory frameworks consists of policies, legislation, international instruments, and relevant national and international agencies. The national and international regulatory frameworks are essential as food is often imported across borders and subjected to transnational legal standards.

## CONCLUSION

Food safety and food security are increasingly acknowledged as essential elements of global governance, sustainable development, and public health. Despite their significance, these areas of law remain underexplored within the curriculum of many law schools in Malaysia. This study demonstrates limited familiarity among the law students at UiTM on legal and regulatory frameworks governing food systems, which creates a gap in their ability to engage critically with emerging legal issues arising from the food safety and food security domain. Law schools in Malaysia must bridge this gap through a targeted curricular intervention. By providing law students with essential information and abilities in this domain, law schools not only improve their graduates' employability and adaptability but also advance the overarching societal objective of establishing a safe, secure, and fair food system.

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## Conflict of Interest Statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests.

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