國立中興大學 通識課程 教學大綱 Syllabus of NCHU General Education Course

課程名稱 course name	(中) 全球清真產業的基礎科學與技術						
	(Eng.) Fundamental Science and Technology of Global Halal Industry						
開課系所班級 dept. & grade	通識教育中心 General Education Center	學分 credits	3	規劃教師 instructor	生管學程 楊上禾/溫曉薇		
課程屬性 course type	必修	授課語言 language	中文/英文 Chinese/English	開課學期 semester	上或下 fall or spring		
課程分類 course classification	109 學年度前入學 enrolled in or before acad		自然領域-物質科學領域				
	110 學年度起入學新生適用 enrolled in or after academic year 2021 統合領域-跨域學習						
課程簡述 course description	本課程提供 3 學分(包含作業、評估、校外參訪及報告),本課程深入探討清真食品的生產與服務,重點關注確保食品符合清真標準的基本原則、規範與實踐。學生將深入了解伊斯蘭飲食法規,以及其在食品生產過程中的應用一從原料採購到食品加工、包裝與分銷等各個環節,本課程涵蓋清真認證、清真食品安全、衛生管理及污染防範措施,學生還將學習清真標準如何影響餐飲服務、餐廳與餐飲業,確保符合伊斯蘭教義及全球清真法規,透過業界案例研究與實際應用,學生將探索全球不斷成長的清真食品產業所面臨的挑戰與機遇。 This course is offered with 3 credits (assignment, evaluation, field trip, and final report). This course provides an in-depth exploration of Halal food production and services, focusing on the essential principles, standards, and practices that ensure food meets Halal requirements. Students will gain a thorough understanding of Islamic dietary laws and how they are applied throughout the food production process—from sourcing ingredients to food processing, packaging, and distribution. The course covers Halal certification, Halal food safety, hygiene practices, and the prevention of contamination. Students will also learn how Halal standards impact food services, restaurants, and catering, ensuring compliance with both Islamic principles and global Halal regulations. Through case studies and practical examples in the industries, students will explore the challenges and opportunities within the growing Halal food industry worldwide.						
教學目標 course objectives	修讀本課程後,學生。 中國	,生產和服務本 ,生產和機構中 ,生產過程 , , , , , , , , , , , , , , , , , , ,	在了解如何獲得食 養清真標準,包括 及防止交叉污染的 處理、分銷及消 青真認證產業在符	品與服務產品 原料採購、 最佳實踐。 費者信任與份	品的清真認證。 集備與加工環 保障機制。		

After taking this course, students will be able to understand and comprehend the basic concept of Halal and Haram in relation to food production and services.

- Identify Halal certification processes and bodies, and how to achieve certification for food and service products.
- Learn how to maintain Halal integrity in the product production, including sourcing, preparation, and processing.
- Implement best practices for Halal product safety, hygiene, and cross-contamination prevention.
- Explore Halal service management, including planning, handling, distribution, and consumer trust/protection.
- Understand global Halal market trends and the business opportunities of Halal-certified industries with the global regulatory system compliance.
 - Distinguish the professional occupations and roles in the global Halal industry.

先修課程 prerequisites

無 None

六項核心能力配比(加總為100%)

The 6 core learning outcomes add up to 100%

人文素養	科學素養	溝通能力	創新能力	國際視野	社會關懷
10%	15%	10%	20%	30%	15%
Humanities Literacy	Scientific Literacy	Communication Skills	Innovative Ability	International Perspective	Social Concerns

	教學方法 teaching methods	學習評量方式 evaluation		
2.	Collaborative Learning Group Discussion SCL (Student Centre Learning)	 Attendance Assignment (group, single, quiz) Mid-exam Final project presentation 	10% 20% 30% 40%	

授課內容(單元名稱與內容、習作/考試進度)

course contents and homework/tests schedule

- 1. Islamic Law on Fundamental Halal Standard
- 2. Halal Product Assurance System (SJPH)
- 3. Halal Supervisor: Role and Responsibilities
- 4. Halal Auditor: Role and Competency Standard
- 5. Halal Slaughterer and Meat Industry Standards
- 6. Halal Chemist: Analytical Techniques in Halal Testing
- 7. Challenges and Innovations in Halal Industry
- 8. Mid-term Evaluation
- 9. Halal Supply Chain & Services
- 10. Halal Marketing and Consumer Preferences
- 11. Future Trends in Halal Industry
- 12. Food Technology, Food Safety, Food Processing, Food Packaging
- 13. Animal Slaughtering, Animal Science, Feed, Animal Welfare
- 14. Biotechnology in Cosmetic and Pharmaceutical Sciences
- 15. Fieldtrip (Halal Audit & Supervisory Roles)
- 16. Final Project Presentation

教科書與參考書目(書名、作者、書局/代理商…)

textbooks & other references (title, author, publisher...)

- 1. Tieman, M. (2011) The application of Halal in supply chain management: in-depth interviews, *Journal of Islamic Marketing*, 2 (2): 186-195.
- 2. Jaafar et al. (2013). The concept of halal logistic- An insight. Conference: The 5th International Conference on Transport and Logistics (ICLT), 2013.
- 3. Andespa, R., Yurni, Y., Aldiyanto, A., Efendi, G. (2024). Challenges and strategies in halal supply chain management for MSEs in West Sumatra: A participatory action research study. International Journal of Safety and Security Engineering, Vol. 14, No. 3, pp. 907-921.
- 4. Islam et al. (2020). A Systematic Review on Halal Supply Chain Research. Proceedings of the International Conference on Industrial Engineering and Operations Management. Dubai, UEA.
- 5. Qurtubi & Kusrini (2017). Research in halal logistics and halal supply chain: Issue and area development. MATEC Web of Conferences 154, 01096
- 6. Aneesh, A.K., & Siddiq, A. (2024). Behaviour of muslim consumer towards halal food products: a review and bibliometric analysis. *Journal of Halal Product and Research*. 7 (2):199-209.
- 7. Tuhin, M.K.W., Miraz, M.H., Habib, M.M. and Alam, M.M. (2022), "Strengthening consumers' halal buying behaviour: role of attitude, religiosity and personal norm", Journal of Islamic Marketing, Vol. 13 No. 3, pp. 671-687.
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- 9. Al-Kwifi, O.S., Abu Farha, A. and Ahmed, Z.U. (2019), "Dynamics of Muslim consumers' behavior toward Halal products: Exploration study using fMRI technology", International Journal of Emerging Markets, Vol. 14 No. 4, pp. 689-708.
- 10. Bux, C., Varese, E., Amicarelli, V., & Lombardi, M. (2022). Halal Food Sustainability between Certification and Blockchain: A Review. Sustainability, 14(4), 2152.
- 11. Rahman, M.M., Razimi, M.S.A., Ariffin, A.S. et al. (2024). Navigating moral landscape: Islamic ethical choices and sustainability in Halal meat production and consumption. Discov Sustain 5, 225.
- 12. Muhammad H. (2021). Halal Business and Sustainability: Synergy of Islamic Business Ethics and Culture. Nusantara Halal Journal. Vol 2 No 2. pp 89-101.
- 13. Tayob, S. (2023). Sustainability and Halal? Global Trade, Molecular Halal, and Exclusionary Politics. In: Turaeva, R., Brose, M. (eds) Religious Economies in Secular Context. New Directions in Islam. Palgrave Macmillan, Cham.
- 14. Mustapha, M.R., Ahamad, F., Hazahari, N.Y. and Samsudin, N. (2024), "Ethical issues in the halal food supply chain: a systematic bibliometric review", Journal of Islamic Marketing, Vol. 15 No. 12, pp. 3804-3819.
- 15. Shariff et al. (2021). Enhancing Halal Sustainability. Selected Papers from the 4th International Halal Conference 2019. Conference proceedings, Springer Nature.
- 16. Zailani, S., Arrifin, Z., Wahid, N. A., & Othman, R. (2010). Halal traceability and tracking systems in strengthening the Halal food supply chain for the food industry in Malaysia. Journal of Food Processing & Technology.
- 17. Putri, N. T., Kharisman, A., Arief, I., & Talib, H. H. A. (2022). Designing food safety management and Halal assurance systems in mozzarella cheese production for small-medium food industry. International Journal of Halal Research.
- 18. Zainuddin, N., Saifudin, A. M., & Deraman, N. (2019). Effect of Halal certification and labeling process on Halal supply chain performance. Supply Chain Management Journal.
- 19. Hatta, F. A. M., Ali, Q. M., Kashim, M. I. A., et al. (2023). Recent advances in Halal bioactive materials for intelligent food packaging indicators. Foods Journal.
- 20. Bujang, A., & Bakar, S. (2023). Halal packaging: Halal control point in manufacturing of packaging materials and Halal labeling. Elsevier.
- 21. Noordin, N., Noor, N. L. M., & Samicho, Z. (2014). Strategic approach to Halal certification system: An ecosystem perspective. Procedia-Social and Behavioral Sciences, Elsevier.
- 22. Rejeb, A., Rejeb, K., & Zailani, S. (2021). Are Halal food supply chains sustainable? A review and bibliometric analysis. Journal of Foodservice Business Research.
- 23. Jaafar, H. S., Abd Aziz, M. L., Ahmad, M. R., & Faisol, N. (2021). Creating innovation in achieving sustainability: Halal-friendly sustainable port. Sustainability Journal, MDPI.
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- 28. Suliman, G. M., Al-Owaimer, A. N., Alobre, M. M., & Swelum, A. A. (2024). Effects of pre-slaughter handling approach and aging on carcass and meat quality attributes in goats. Heliyon, 10(1).

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- 31. Kamruzzaman, M., Islam, M. R., & Raiyan, A. (2024). Effect of poor post-slaughter handling on physicochemical and microbial quality of fresh broiler in Bangladesh. Asian Food Processing and Packaging Journal.
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- 35. Ismail, I., & Huda, N. (2024). Current techniques and technologies of meat quality evaluation. Handbook of Processed Functional Meat Products, Springer.
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- 50. Tan, N. A., Idris, S. H., & Isa, F. M. (2019). The impact of biotechnology on the pharmaceutical industry in Malaysia: A critical discourse. Environmental Policy and Law Journal.

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teaching aids & teacher's website

課程輔導時間 office hours

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