



YAŞAR UNIVERSITY
FACULTY OF AGRICULTURAL SCIENCES AND TECHNOLOGIES
DEPARTMENT OF AGRICULTURAL ECONOMICS
COURSE SYLLABUS

| Course Title | Course Code | Semester | Course Hour/Week | | Yaşar Credit | ECTS |
|---|-------------|------------------------|------------------|---------------|--------------|------|
| Sustainable Agri-Food Production and Supply Chain Management | FAST 0150 | Fall / Spring / Summer | Theory 3 | Practice 0 | 3 | 5 |
| Course Type <input type="checkbox"/> Compulsory <input checked="" type="checkbox"/> Elective | | | | | | |

| | |
|---|--|
| Language of Instruction | English |
| Level of Course | <input type="checkbox"/> Associate Degree (Short Cycle) <input checked="" type="checkbox"/> Undergraduate (First Cycle) <input type="checkbox"/> Graduate (Second Cycle) <input type="checkbox"/> Doctoral Course (Third Cycle) |
| Special Pre-Conditions of the Course | - |

| | | |
|--|---|--|
| Course Coordinator | Assoc. Prof. Dr. Ruhan AŞKIN UZEL | Mail: ruhan.uzel@yasar.edu.tr Web:--- |
| Course Instructor(s) | Assoc. Prof. Dr. Ruhan AŞKIN UZEL Prof. Dr. Arif HEPBASLI Prof. Dr. Aylin GUNEY Prof. Dr. Yigit KAZANCOGLU Assoc. Prof. Dr. Aysel YILDIZ | Mail: ruhan.uzel@yasar.edu.tr arif.hepbasli@yasar.edu.tr aylin.guney@yasar.edu.tr yigit.kazancoglu@yasar.edu.tr ayselin.yildiz@yasar.edu.tr Web: --- |
| Course Assistant(s)/Tutor (s) | --- | Mail: ---- Web:---- |
| Aim(s) of the Course | This course aims to underline the fundamentals of agri-food industry by examining its various aspects such as sustainability and sustainable production, supply chain management, circular economy, food regulation, global warming, environmental concern, waste management. | |
| Learning Outcomes of the Course | On the successfully completion of this course, all students will have developed knowledge and understanding of: <ul style="list-style-type: none">• European Union as a supranational organization.• The students in the agri-food production field will understand the EU-Politics and public structure effect on sustainability. Food and other related issues are an important academic filed in the EU and this awareness level will expand their knowledge, open up their evaluations regarding EU and add academic EU background to their personal and academic perspectives.• Food Technology students will understand and evaluate the transnational integration of the subject which led the gradual Europeanization of national as well as issue-specific public spheres. | |
| Course Content | The course will be important information source for the EU politics, agri-food production systems, sustainability, supply chain management, waste treatment strategies, energy efficient production, etc. | |

| COURSE OUTLINE/SCHEDULE (Weekly) | | | |
|---|--|--|--|
| Week | Topics | Preliminary Preparation | Methodology and Implementation (theory, practice, assignment etc) |
| 1 | Introduction to EU, EU History and EU Policies | M. Cini, N. Pérez-Solórzano Borragán. 2016. European Union Politics. Fifth Edition, Oxford University Press, USA. | Theory |
| 2 | Agri-Food Industry in the EU | Lang, Tim, and David Barling. "Food security and food sustainability: reformulating the debate." <i>The Geographical Journal</i> 178.4 (2012): 313-326. | Theory |
| 3 | Rural Development in the EU or Common Agricultural Policy of the EU | C. Csáki, Z. Lerman. 2000. The Challenge of Rural Development in the EU Accession Countries. World Bank Publications, Bulgaria. | Theory |
| 4 | Energy Consumption, Energy Policies of EU in Industry and Relevant Effects on Global Warming | F. Creutzig et al. 2014. Catching two European birds with one renewable stone: Mitigating climate change and Eurozone crisis by an energy transition. <i>Renewable and Sustainable Energy Reviews</i> , 38, pp. 1015–1028. | Theory |
| 5 | EU Food Law Regulations | N. D. Fortin. 2016. Food Regulation: Law, Science, Policy, and Practice. John Wiley & Sons, USA. | Theory, practice |
| 6 | Sustainability, Its Importance and Application to the Agri-Food Business | Crane, Andrew, and Dirk Matten. Business ethics: Managing corporate citizenship and sustainability in the age of globalization. Oxford University Press, 2016. | Theory, practice |
| 7 | Traditional Technologies in EU Agri-Food Industry + Midterm Exam | Guerrero, Luis, et al. "Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study." <i>Appetite</i> 52.2 (2009): 345-354. | Practice |
| 8 | New Sustainable Technologies in EU Agri-Food Industry | Guerrero, Luis, et al. "Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study." <i>Appetite</i> 52.2 (2009): 345-354. | Theory, practice |
| 9 | Sustainability in Food Chains | Akkerman, Renzo, Poorya Farahani, and Martin Grunow. "Quality, safety and sustainability in food distribution: a review of quantitative operations management approaches and challenges." <i>Or Spectrum</i> 32.4 (2010): 863-904. | Theory |
| 10 | The Management Components of Agri-Food Supply Chain Management | Chandrasekaran, N. and Raghuram, G. "Agribusiness Supply Chain Management". CRC Press, (2014), Boca Raton. | Theory, practice |
| 11 | Individual Segments of Agri-Food Supply Chain Management | Solér, C., Bergstrom, K. and Shanahan, H. Green Supply Chains and the Missing Link between Environmental Information and Practice. <i>Business Strategy and the Environment</i> , (2010), 19, 14-25. | Theory, practice |
| 12 | Comparison of Traditional and New Technologies in Terms of Productivity, R&D and Innovation for Sustainable Development in EU Agri-Food Industry | Olesen, Jørgen E., and Marco Bindi. "Consequences of climate change for European agricultural productivity, land use and policy." <i>European journal of agronomy</i> 16.4 (2002): 239-262. | Theory |

| | | | |
|----|--|--|-----------------------|
| 13 | Adoption of Quality Management Policies for Sustainable Production and European Federation of Quality Management Innovation Management Model | Lambert, Douglas M., Martha C. Cooper, and Janus D. Pagh. "Supply chain management: implementation issues and research opportunities." The international journal of logistics management 9.2 (1998): 1-20. | Theory |
| 14 | Industry 4.0 and Sustainability in Food Production | Rüßmann, Michael, et al. "Industry 4.0: The future of productivity and growth in manufacturing industries." Boston Consulting Group 9 (2015). | Practice, discussions |
| 15 | Final Exam | Exam | Exam |

| | |
|---|---|
| Required Course Material (s) /Reading(s)/Text Book (s) | The course materials are provided by the lecturer. |
| Recommended Course Material (s)/Reading(s)/Other | <ul style="list-style-type: none"> • Mari Elken, Expert group institutionalization and task expansion in European education policy-making, European Educational Research Journal, 2017, 147490411772040 • Cathy-Austin Otekhile, Nahanga Verter, The Socioeconomic Characteristics of Rural Farmers and their Net Income in Ojo and Badagry Local Government Areas of Lagos State, Nigeria, Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 2017, 65, 6, 2037 • N. D. Fortin. 2016. Food Regulation: Law, Science, Policy, and Practice. John Wiley & Sons, USA. • Elzen, Boelie, Frank W. Geels, and Kenneth Green, eds. System innovation and the transition to sustainability: theory, evidence and policy. Edward Elgar Publishing, 2004. • Cushen, M., et al. "Nanotechnologies in the food industry—Recent developments, risks and regulation." Trends in Food Science & Technology 24.1 (2012): 30-46. • Park, Seongsoon, and Romas J. Kazlauskas. "Biocatalysis in ionic liquids—advantages beyond green technology." Current Opinion in Biotechnology 14.4 (2003): 432-437. • Hamprecht, Jens, et al. "Controlling the sustainability of food supply chains." Supply Chain Management: An International Journal 10.1 (2005): 7-10. • Ahumada, O. and Villalobos, J.R. Application of Planning Models in the Agri-Food Supply Chain: A Review. European Journal of Operational Research, (2009), 196, 1-20. • Solér, C., Bergstrom, K. and Shanahan, H. Green Supply Chains and the Missing Link between Environmental Information and Practice. Business Strategy and the Environment, (2010), 19, 14-25. • Olesen, Jørgen E., and Marco Bindi. "Consequences of climate change for European agricultural productivity, land use and policy." European journal of agronomy 16.4 (2002): 239-262. • Lambert, Douglas M., Martha C. Cooper, and Janus D. Pagh. "Supply chain management: implementation issues and research opportunities." The international journal of logistics management 9.2 (1998): 1-20. • T. Lang, M. Heasman. 2015. Food Wars: The Global Battle for Mouths, Minds and Markets. 2nd Ed., Routhledge-Taylor and Francis Press, New York. |

| ASSESSMENT | | |
|-------------------------------------|---------------|--------------------|
| Semester Activities/ Studies | NUMBER | WEIGHT in % |
| Mid- Term | 1 | 30 |
| Participation | | |
| Quiz | | |
| Assignment (s) | | |

| | | |
|---|---|------------|
| Project/ Final Project/ Dissertation and Preparation | | |
| Laboratory / Practice (Virtual Court, Studio Studies etc.) | | |
| Field Studies (Technical Visits) | | |
| Presentation/ Seminar | 1 | 30 |
| Final Examination/ | | |
| Other (Placement/Internship etc.) | | |
| TOTAL | | 60 |
| Contribution of Semester Activities/Studies to the Final Grade | | 60 |
| Contribution of Final Examination/Final Project/ Dissertation to the Final Grade | | 40 |
| TOTAL | | 100 |

| CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME OUTCOMES | | | | | | |
|---|--|---|---|---|---|---|
| No | Programme Outcomes | Level of Contribution (1- lowest/ 5- highest) | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | The basic theoretical background produced by the fields of agriculture and food businesses and the branches of management science. | | X | | | |
| 2 | Knowledge and skills on ecosystem, biodiversity and sustainable resource management, renewable energy, rural development, facility design, agri-food supply chain planning and management, and the use of smart and sensitive agriculture technologies. | X | | | | |
| 3 | Examines the events and facts related to agricultural technologies with scientific methods and techniques by using the theoretical and applied knowledge; identify problems; analyzes environmental, social and economic aspects; develops solution proposals with scientific methods; validates, passes, and applies. | | | | | X |
| 4 | Up-to-date information about agri-food sectoral practices and innovation-based agri-food entrepreneurship methods; experience in system analysis, design and solution creation and implementation for a complex real-life problem in at least one industry. | X | | | | |
| 5 | Reaches data by using information technologies effectively, turns it into information, uses information and adopts lifelong learning with the knowledge and skills acquired in the field. | | | | X | |
| 6 | Carries out studies related to the field independently, takes responsibility in interdisciplinary teamwork; effectively shares the results of the study with experts or non-experts in oral and written environment. | | | | X | |
| 7 | Follows the knowledge in the field and communicates with colleagues by using the English language at the B1 level of the European Language Portfolio. | | | X | | |
| 8 | Sufficient awareness of ethical values, agri-food law, universality of social rights, social justice, food safety and security, quality culture and protection of socio-cultural values, environmental protection, zero waste, occupational health and safety. | | | | X | |

| ECTS (STUDENT WORKLOAD) | | | | |
|---|--------|--------|------|----------------|
| ACTIVITIES | NUMBER | UNIT | HOUR | TOTAL WORKLOAD |
| Course Teaching Hour (14 weeks* total course hours) | 14 | week | 3 | 42 |
| Preliminary Preparation and finalizing of course notes, further self- study | 14 | week | 1 | 14 |
| Assignment (s) | | | | |
| Presentation/ Seminars | 1 | number | 21 | 21 |
| Quiz and Preparation for the Quiz | | | | |
| Mid- Term(s) | 1 | number | 12 | 12 |
| Project (s) | | | | |
| Field Studies (Technical Visits, Investigate Visit etc.) | 1 | number | 10 | 10 |

| | | | | |
|---|---|--------|----|---------------|
| Practice (Laboratory, Virtual Court, Studio Studies etc.) | | | | |
| Final Project/ Dissertation and Preparation | 1 | number | 20 | 20 |
| Final Examination | | | | |
| Other (Placement/Internship etc.) | | | | 119 |
| Total Workload | | | | 119/25 |
| Total Workload/ 25 | | | | 4.76 |
| ECTS | | | | 5 |

| |
|---|
| ETHICAL RULES WITH REGARD TO THE COURSE (IF AVAILABLE) |
|---|

| |
|--|
| The student must fulfill the basic course obligations determined and communicated by the course coordinator, and should not engage in behavior contrary to ethical rules (fake, distortion, plagiarism, republishing, etc.) in course-related activities. Suspicious situations will be reported and investigated by the relevant unit management and may lead to disciplinary action. |
|--|

| |
|---|
| STUDENT WITH DISABILITIES OR SPECIAL NEEDS |
|---|

| |
|---|
| Students with disabilities or special needs are encouraged to contact the instructor and the Unit for Student with Disabilities (http://eob.yasar.edu.tr/) for academic adaptations. |
|---|

| |
|---|
| ASSESSMENT and EVALUATION METHODS: |
|---|

| |
|--|
| Final Grades will be determined according to the Yaşar University Associate Degree, Bachelor Degree and Graduate Degree Education and Examination Regulation |
|--|

| | |
|-------------------------|--|
| PREPARED BY/DATE | Assoc. Prof. Dr. Ruhan AŞKIN UZEL / 24.12.2021 |
|-------------------------|--|

| | |
|------------------------|--|
| UPDATED BY/DATE | Assoc. Prof. Dr. Ruhan AŞKIN UZEL / 18.02.2022 |
|------------------------|--|

| | |
|-------------------------|---|
| APPROVED BY/DATE | Prof. Dr. Levent KANDİLLER / 31.03.2022 |
|-------------------------|---|