COURSE OUTLINE

1. GENERAL

SCHOOL	APPLIED ECONOMIC AND SOCIAL SCIENCES		
ACADEMIC UNIT	AGRIBUSINESS AND SUPPLY CHAIN MANAGEMENT		
LEVEL OF STUDIES	*Undergraduate*		
COURSE CODE	**ICT703**	**SEMESTER**	7th
COURSE TITLE	SUPPLY CHAIN INFORMATION SYSTEMS		

INDEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	3	5
Laboratory exercises	2	

COURSE TYPE	General Background
PREREQUISITE COURSES	NO
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek
IS THE COURSE OFFERED for ERASMUS STUDENTS?	YES (in English)
COURSE WEBSITE (URL)	https://mediasrv.aua.gr/eclass/modules/auth/opencourses.php?fc=123

2. LEARNING OUTCOMES

Learning Outcomes

The aim of the course is:

- to help students to become familiarized with concepts from the two fields: logistics and information systems and understand their interaction
- to help students to understand the utilization of advanced technologies and information systems for supply chain management
- to help students to acquire the skills of using information systems to manage the supply chain

Upon successful completion of the course, the student will be able to:

- describe the type of data coming from each supply chain node, their interconnections, the flow of information between the nodes, the simulation of business processes in an information system
- implement techniques for the analysis, design and implementation of information systems
- explain the operation of the main information systems used in supply chain management
- explain the operation of advanced technologies and advanced information systems used in supply chain management
- use information systems to manage the supply chain

General Competences

Adapting to new situations

Decision-making

Working independently

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas Teamwork

Project planning and management

Respect for difference and multiculturalism

Respect for the natural environment

Showing social, professional, and ethical responsibility and sensitivity to gender issues

Criticism and self-criticism

Production of free, creative and inductive thinking

3. SYLLABUS

1. Basic concepts of information systems and supply chain
2. Data interconnections between supply chain nodes, information flow between nodes and simulation of business processes in the information system
3. Techniques for analyzing, designing and implementing information systems in the context of supply chain management requirements
4. Resource Planning Systems (MRP, MRPII, JIT). Distribution Requirements Planning Systems (DRP). Advanced Planning Systems (APS).
5. Enterprise Resource Management Systems (ERP): Implementation, advantages, disadvantages, greek/international ERPs
6. Enterprise Resource Management Systems (ERP): Main subsystems
7. Enterprise Resource Management Systems (ERP): Case studies
8. Customer Relationship Management Systems (CRM). Partner Relationship Management Systems (PRM)
9. Warehouse Management Systems (WMS): Implementation, advantages, disadvantages, greek/international WMS
10. Warehouse Management Systems (WMS): Operations. Case studies

11. Transportation Management Systems (TMS)

12. Advanced technology and telematics systems for automating supply chain processes

13. Internet of Things and ubiquitous computing in supply chain

The laboratory part of the course covers the following topics:

- Use of advanced information systems and technologies in Logistics (e.g. ERP, WMS, vehicle routing, etc)

A combination of teaching and learning methods will be used, aiming at the active participation of the students and the practical application of the thematic units under examination; there will also be lectures using audiovisual media, discussions, and analyses of case studies on real business issues, experiential (group) activities, as well as projections of relevant videos. The students will also undertake an individual or group project. Furthermore, articles, audiovisual lecture materials, web links/addresses, useful information, case studies and exercises for further practice are posted in digital form on the AUA Open e-Class platform.

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face -to-face, Distance learning
USE OF INFORMATION and COMMUNICATIONS TECHNOLOGY	• Support of the learning process through the University's AUA Open eClass platform (integrated e-Course Management System) • Support of lectures using presentation software • Use of audiovisual material • Use of web applications **Communication with students**: face-to-face at office hours, email, eclass platform
TEACHING METHODS	*Activity* / *Workload* Lectures (direct) 39 Laboratory Practice 26 Essay Writing 20 Autonomous study 36 Advisory Support 0,5 Examination 2 Laboratory Examination 2 *Total (About 25 hours of study per ECTS)* ***125,5***
STUDENT PERFORMANCE EVALUATION	The evaluation process is in the language that the course is taught (Greek or English) and consists of: i. Compulsory written final examination at the end of the semester (weighting factor **70**% at least) which may includes: • Multiple choice questionnaires

	• Open-ended questions • Problem solving • Oral examination **Evaluation criteria:** correctness, completeness, clarity ii. Optional written exam or essay during the semester (weighting factor 30%) which may includes: • Multiple choice questionnaires • Open-ended questions • Problem solving • Essay/report • Oral examination **Evaluation criteria:** correctness, completeness, clarity **Special learning difficulties:** Students with **special learning difficulties** in writing and reading (as they are certified and characterized by a competent body) are examined based on the procedure provided by the Department. **Specifically-Defined Criteria:** The evaluation criteria are made known during the first lesson and are clearly stated on the course website and the AUA Open e-class platform. The answers to the exam questions are posted on the AUA Open e-Class platform after the exam. The students are allowed to see their exam paper after its grading (during the announced office hours) and receive explanations about the grade they received.

5. ATTACHED BIBLIOGRAPHY

Suggested Bibliography in Greek Language:

- Πολλάλης Ι., Βοζίκης Α (2015). Πληροφοριακά Συστήματα Διαχείρισης Επιχειρησιακών Πόρων, εκδ. Utopia.
- Στεφάνου Κ., Μπιάλας Χ,, (2014). Σύγχρονα Επιχειρησιακά Συστήματα, Πληροφοριακά Συστήματα Διοίκησης και Συστήματα Επιχειρησιακών Πόρων (ERP), εκδότης Κ. Στεφάνου.
- Στεφάνου Κ., Μπιάλας Χ,, (2017). Συστήματα Επιχειρησιακών Πόρων και Εφαρμογές με το

σύστημα SAP, Εκδότης Αλτιντζής Α.
- Φιτσιλής, Π. (2015). Σύγχρονα πληροφοριακά συστήματα επιχειρήσεων, ERP-CRM-BPR, [ηλεκτρ. βιβλ.] Αθήνα: Σύνδεσμος Ελληνικών Ακαδημαϊκών Βιβλιοθηκών, Κάλλιπος, Διαθέσιμο στο: http://hdl.handle.net/11419/2256
- Φωλίνας Δ., Παπαδοπούλου Ε.Μ. (2013). Διαχείριση διαδικασιών αποθήκης με τη χρήση πληροφοριακού συστήματος, Ιδιωτική έκδοση, Θεσσαλονίκη.
- Laudon, K., Laudon J. (2015). Πληροφοριακά Συστήματα Διοίκησης, 11η Αμερικάνικη Έκδοση, Κλειδάριθμος

Suggested Bibliography in English Language:

- Baumann, F., Ceniza, G., Massicette, S., Medepalli, A., Thomas, K. (2017). Digital Supply Chain For Dummies, JDA Software Group.
- Kurbel, K., (2013). Enterprise Resource Planning and Supply Chain Management, Springer.
- Martin, M. (2014). Discover Logistics with SAP (SAP ERP and SAP SCM), 2nd updated edition, SAP Press.
- Monk, E., Wagner, B. (2012). Concepts in Enterprise Resource Planning, Course Technology
- Olson D., (2012). Supply Chain Information Technology, Business Expert Press.
- Temponi, C., Vandaele, N. (eds) (2018). Information Systems, Logistics, and Supply Chain, Lecture Notes in Business Information Processing, Springer.
- Sousa, M.J., Cruz, R., Caracol, C. Dias, I. (2017). Handbook of Research on Information Management for Effective Logistics and Supply Chains, IGI Global.
- Wang, J. (2009). Innovations in Supply Chain Management for Information Systems: Novel Approaches, 1st edition Business Science Reference.

Related academic Journals:

- International Journal of Information Systems and Supply Chain Management (IJISSCM)
- Operations and Supply Chain Management: An International Journal (OSCM)
- Journal of Information Technology Impact (JITI)
- International Journal of Intelligent Enterprise (IJIE)
- International Journal of Logistics Systems and Management
- Journal of Enterprise Information Management
- Journal of Enterprise Resource Planning Studies
- International Journal of Enterprise Information Systems (IJEIS)

Instructor's Notes