COURSE OUTLINE

(1) GENERAL

SCHOOL	Engineering		
ACADEMIC UNIT	Financial & Management Engineering		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE		**SEMESTER**	**8th**
COURSE TITLE	Supply Chain Management I		
INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*		**WEEKLY TEACHING HOURS**	**CREDITS**
Credits are awarded for the whole course		3	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).			
COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Specialised genera knowledge		
PREREQUISITE COURSES:	None		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)	http://www.fme.aegean.gr/en/c/supply-chain-management		

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

By completing this module, each student will be able to:

- Understand the fundamental principles for the management of supply chains with emphasis on planning and execution processes
- Understand the different distribution channels and the role of third party logistics operators (3PLs, 4PLs)
- Understand the importance of keeping stock and techniques for optimization stock levels
- Understand the role of suppliers, the methods for organizing procurement activities and models for suppliers relationship management
- Understand methods and techniques for design a warehouse / distribution centre
- Choose information systems for warehouse management and material handling equipment
- Organize transportation systems and choose the most suitable transportation mean
- Understand the importance of city logistics, UCCs and reverse logistics
- Choose information systems for transportation management
- Evaluate and make use of emerging technologies (Logistics 4.0) for managing information flow in supply chain networks

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

- Decision making
- Team work
- Search for, analysis and synthesis of data
- Application of optimization methods and techniques
- Choose and assess of operations tools for supply chain operations
- Production of free, creative and inductive thinking

(3) SYLLABUS

This course aims at presenting the fundamental processes of supply chain planning and execution in enterprises and organizations. Emphasis is given to the strategic role and the trends in managing supply networks, in customer service level, in use of quantitative methods and techniques for solving typical supply chain problems as well as in the description of emerging technologies and information systems for the optimization of logistics and transport operations.

The syllabus of the course is as follows:

- Introduction to supply networks: Definitions and main characteristics
- Order processing and customer service
- Distribution channels and third/fourth party logistics operations (3PLs, 4PLs)
- Demand forecasting and stock control for the retail sector (pull scenarios)
- Design and operation of a warehouse / distribution centre
- Information systems for warehouse management (e.g. WMS, pick-to-light, voice picking, etc.) and material handling equipment
- Organization of transportation networks and type of transportation modes
- Green logistics and sustainable transport
- City logistics and reverse logistics
- Emerging technologies (Logistics 4.0)
- Case studies / Best practices from Greece and abroad

TEACHING and LEARNING METHODS - EVALUATION

DELIVERY
Face-to-face, Distance learning, etc.

- Face-to-face

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
Use of ICT in teaching, laboratory education, communication with students

TEACHING METHODS
The manner and methods of teaching are described in detail.
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS

Activity	*Semester workload*
Lectures	30
Self-study	60
Case studies	57
Team project	50
Final exam	3
Course total	200

STUDENT PERFORMANCE EVALUATION
Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

Evaluation type	*Percentatge (%)*
Final exams	80%
Team project	20%
Total	100%

The evaluation criteria described above are available in the webpage of the course

(4) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Ballou, R.H. (2004) "Business Logistics/Supply Chain Management", Fifth Edition, Prentice Hall, Englewood Cliffs, New Jersey
- Stock, J.R., Lambert D.M. (2000), "Strategic Logistics Management", Irwin, UK
- Rushton, A., Oxley, J., Croucher, P. (2000) "The Handbook of Logistics & Distribution Management", Second Edition, The Institute of Logistics & Transport

- Minis, I., Zeimpekis, V., Dounias, G., Ampazis, N. (Eds.) (2011) Supply Chain Optimization, Design and Management: Advances and Intelligent Methods, IGI Global Publishing, ISBN: 978-1-61520633-9
- Papadimitriou, E., Schinas, O. (2004) «Introduction to Logistics» Stamoulis Publications, Athens, ISBN 960351411X (in Greek)

- Related academic journals:

- International Journal of Physical Distribution and Logistics Management
- Supply Chain Management: An International Journal
- International Journal of Logistics Research and Applications
- International Journal of Logistics Management
- Transportation Research Part C: Emerging technologies
- Transportation Research Part D: Transport & Environment
- Transportation Research Part E - Logistics and Transport Review
- International Journal of Production Economics
- Omega - International Journal of Management Science
- Interfaces