

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	TECHNOLOGY		
<b>DEPARTMENT</b>	FORESTRY, WOOD SCIENCES & DESIGN		
<b>LEVEL</b>	POSTGRADUATE		
<b>COURSE CODE</b>	M129	<b>SEMESTER</b>	2 <sup>nd</sup>
<b>COURSE TITLE</b>	MODERN PRODUCTION COSTING METHODS		
<b>ACTIVITIES</b>		<b>WEEKLY HOURS</b>	<b>ECTS</b>
Lectures		2	6
<b>TOTAL</b>		2	6
<b>TYPE OF COURSE</b>	COMPULSORY IN MANAGEMENT AND MARKETING SPECIALIZATION, ELECTIVE COURSE IN SPECIALTIES PRODUCT DESIGN & TECHNOLOGY AND MANUFACTURING		
<b>PREREQUISITES:</b>	NO		
<b>LANGUAGE OF TEACHING AND EXAMINATION</b>	GREEK		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	NO		
<b>WEBPAGE COURSE (URL)</b>	<a href="https://eclass.uth.gr/courses/FWSD_P_127/">https://eclass.uth.gr/courses/FWSD_P_127/</a>		

### (2) LEARNING OUTCOMES

Learning Outcomes
<p>The course aims to introduce students to the understanding and application of simple and effective methods of calculating the cost of production of a product, identifying the points of a business in which it is possible to reduce its operating costs, as well as managing the finances of a business, especially during the economic crisis.</p> <p>Upon completion of the course the student is able to know:</p> <ul style="list-style-type: none"> <li>• To accurately calculate the production cost of a product</li> <li>• To determine the cost of orders, services and products so that the company can follow a correct pricing policy,</li> <li>• To identify the source of any waste within the company and to ascertain the causes (if any) of a reduction in its efficiency,</li> <li>• To conduct more effective controls in the operation of the various departments of a company,</li> <li>• To be able to evaluate whether an investment will have a return or not</li> <li>• To be able to calculate and analyze equipment depreciation</li> <li>• Easily calculate the costs of materials, labor, employment of product production machines, their building facilities, and investments in general</li> <li>• To be able to determine the cost of producing products, so that he can make informed proposals for their design, production and distribution</li> </ul>
General Skills

### (3) COURSE CONTENT

In the theoretical part of the course the student is taught and learns about:
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- Introductory concepts. Economic Principle, Productivity, Efficiency, Economy, Direct & Indirect Costs, Manufacturing Overheads (G.B.E.), Fixed & Variable Costs, Marginal Costs, Production Costs, Operating Costs, Disposal Costs, Total Costs, ABC Activity Costs.
- The importance of costing to the business. Types and methods of costing, calculations of depreciation of machinery and buildings, calculations of capital interest.
- Costing A' & auxiliary materials. Calculations of quantities and prices of raw materials during the costing of carpentry constructions and furniture (types of materials, losses, mixtures of varnishes, glues, etc., recording of materials), calculations of prices of auxiliary materials.
- Job costing. Labor remuneration (time basis, productivity premium, performance premium, operational remuneration), Calculation of labor time in all production phases of a woodwork or furniture, Costing of labor and machinery employment of a furniture or woodwork business.
- Calculations of industrial overheads. Calculation of the General Industrial Costs of a woodworking or furniture production company and their allocation to the production costs of each manufactured product separately. Determination of distribution coefficients of General Industrial Costs in relation to direct materials, direct labour, machine cost etc.
- Production and operation planning with reduced costs. Better utilization of materials, yarns, artisan work times, machine work times, impact on production costs.
- Modern activity based costing (A.B.C). Elements and basic functions of the A.B.C. method, its comparison with traditional costing systems, ways of its development and classification of activities.
- Breakeven calculation. Analysis of costs and revenues and the purpose of calculating the break-even point of an enterprise as a whole and by product produced.
- Cost reduction at points in the production process and operation. Analysis of the operating costs of the departments of the company's organizational chart and identification of points where there can be more rational management. Proper management of cash, debtors, inventory and work in progress, paying off creditors, managing profits to improve business operations.
- Modern activity based costing (A.B.C). Introduction, net present value criteria, internal rate of return, cost-benefit analysis, capital recovery, enterprise value calculation.
- Creation of business efficiency indicators. Maintaining statistical data to generate ratios of gross profit, cost of sales, operating profit to sales, capital and operating leverage efficiency, asset utilization or sales volume, fixed assets utilization, working capital utilization, equity, net profit, return on total assets, return on assets, return on investment, operating return, sales margin, change.
- Business risk analysis. Risks faced by businesses, reasons why risk analysis is necessary, assignment of responsibilities, risk management, risk analysis and business plan.
- Presentation of production/service cost calculation study.

From the 1st lesson, a suggested list of tasks is given that the student should undertake and prepare (individually) until the end of the semester of the MSc.

The relevant directions are given, while rich material and instructions are posted on the e-class.

The final assignment includes, in addition to paper and electronic submission, a public oral presentation on the chosen topic, on a set date (usually the 12th or 13th week of classes). The presentation lasts 15 minutes and is followed by 5 minutes of questions from the students present. The teacher intervenes - if necessary - for comments, observations, corrections.

Students are graded on their overall performance in their final paper: 70% on content and editorial specifications and 30% on preparation of the online presentation and oral support thereof.

Οι βαθμοί αυτοί προσμετρούνται συνολικά 40% στον γενικό βαθμό που θα λάβουν οι φοιτητές μετά την τελική γραπτή εξέταση της θεωρίας.

#### (4) TEACHING AND LEARNING METHODS - EVALUATION

<b>COURSE DELIVERY METHOD</b>	In class and remotely	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	<ul style="list-style-type: none"> <li>• Use of PC, ppt slides, projector</li> <li>• Learning process support through the e-class online platform</li> <li>• Interactive Whiteboard</li> <li>• Eight (8) PCs in the Laboratory to exercise students in a questionnaire processing program</li> </ul>	
<b>MANAGEMENT OF TEACHING</b>	<b>Activity</b>	<b>Semester Workload</b>
	Lectures	26
	Small individual practice tasks	20
	Final Subject	60
	Independent Study	44
	<b>Course Total (25 workload hours per credit unit)</b>	<b>150</b>
<b>STUDENT EVALUATION</b>	<p>I. Written final exam (60%) which includes:</p> <ul style="list-style-type: none"> <li>- Short answer questions from all the material in the book</li> <li>- Critical presentation questions and solving various costing problems.</li> </ul> <p>II. Delivery and presentation of Individual Work (40%).</p>	

#### (5) RECOMMENDED-BIBLIOGRAPHY

<p>- <i>Suggested Bibliography:</i></p> <ul style="list-style-type: none"> <li>• Κεχράς, Ι. (2009). Η Σύγχρονη Κοστολόγηση κατά Δραστηριότητα - Activity Based Costing (A.B.C.), Εκδόσεις Σταμούλη, Αθήνα.</li> <li>• Λιαργκόβας, Γ.Π. και Κορρές Γ. (2009). Οικονομική των Επιχειρήσεων. Εκδόσεις Σταμούλη, Αθήνα.</li> <li>• Θωμαδάκης, Σ. και Αλεξάκης Π. (2006). Οικονομική των Επιχειρήσεων. Εκδόσεις Σταμούλη, Αθήνα.</li> <li>• Πομόνης, Ν. (2009). Κοστολόγηση (6η Έκδοση). Εκδόσεις ΣΤΑΜΟΥΛΗ, Αθήνα.</li> <li>• Πάγγειος, Ι. (2004). Εφαρμογές στην Κοστολόγηση. Εκδόσεις Αθ. Σταμούλη, Αθήνα.</li> <li>• Δημοπούλου – Δημάκη, Ι. (2002). Κοστολόγηση. Εκδόσεις INTERBOOKS - Αθήνα.</li> <li>• Μπέης, Ι. (2004). Η Οικονομία και τα Κόστη της Παραγωγής. Εκδοτικός οίκος ΠΑΡΑΤΗΡΗΤΗΣ ΑΕ, Θεσσαλονίκη,</li> <li>• Βαρβάκης, Κ. (2003). Κοστολόγηση και Κοστολογική Οργάνωση. Έκδοση Βαρβάκης Κ., Αθήνα.</li> <li>• Μητσστάκης, Ε. (2003). Κοστολόγηση Προτύπων με το Πρόγραμμα Eurocost. Εκδόσεις ΚΛΕΙ-ΔΑΡΙΘΜΟΣ, Αθήνα.</li> <li>• Μπέης, Ι. (2006). Παραγωγικότητα – Μείωση του κόστους – Ανταγωνιστικότητα. Εκδόσεις Ε-πίκεντρο Α.Ε., Αθήνα.</li> <li>• Wolfgang, W. (1997). Κοστολόγηση ξυλουργικών εργασιών. Ευρωπαϊκές Εκδόσεις, Αθήνα</li> </ul>
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