

COURSE OUTLINE

1. GENERAL

SCHOOL	School of Technology		
DEPARTMENT	Department of Forestry, Wood Sciences and Design (Karditsa)		
LEVEL	<i>Undergraduate</i>		
CODE	ΔΠΥ931	STUDENT SEMESTER	9th
COURSE TITLE	Non-Wood Forest Products		
ACTIVITIES		WEEKLY HRS	ECTS
Lectures		2	6
Exercises		1	
<i>Total</i>		3	6
TYPE OF COURSE	Generic knowledge and Skills Development		
PREREQUISITES:	none		
LANGUAGE TEACHING AND EXAMINATION:	Greek		
THE COURSE OFFERED TO STUDENTS ERASMUS	No		
WEBPAGES COURSE (URL)			

2. LEARNING OUTCOMES

Learning Outcomes	
<p>The aim of the course is to make students familiar with the non-wood forest products (aromatic plants, mushrooms, resin, etc.), which can be produced from both forests and crops. To be able to analyze and choose the appropriate socio-technical systems of production, sustainable management and exploitation of non-timber forest products.</p> <p>At the end of the course students will be able to:</p> <ul style="list-style-type: none"> • know the main non-wood forest products • propose, describe and apply appropriate management measures for their sustainable management • know and apply cultivation methods for the production of non-wood forest products. • understand the importance of the ecological, social and economic parameters of collecting non-wood forest products 	
General Skills	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the necessary technologies. • Adaptation to new situations. • Teamwork. • Decision making. • Demonstration of social, professional and ethical responsibility. • Work in an interdisciplinary environment. • Respect for the natural environment. • Promotion of free, creative and inductive thinking. • Generation of new research ideas. 	

3. COURSE CONTENT

Lectures:

Definitions, distinction and classification of non-wood forest products: products for food (nuts, ornamental plants, forest fruits, mushrooms, seeds, herbs, spices, aromatic plants, pollen, roots, leaves, stems, bulbs, etc.), resin-gum, bark, cork, brown soil, ornamental shrubs and trees (Christmas trees), fibers (for construction, furniture, clothing, textiles), aromatic honey plants, essential oils, natural and animal products for pharmaceutical and other uses. Sustainable harvesting of non-wood forest products. Possibilities of utilization of non-wood forest products (development of crops and plantations, post-harvest, crafts and industries). Relationship of non-wood forest product harvesting to multi-purpose forestry, forest-dwelling population and green consumerism in developed countries. Compilation of an economic and technical study for the production of non-wood forest products.

Exercises:

Identification of non-wood forest products (aromatic, bee-eating plants, forest fruits, etc.), Distillation and production of essential oils, drying and preservation techniques of non-wood forest products

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY METHOD	Combined application of educational methods and techniques with the aim of strengthening the active participation of students in the course : Lectures (in the auditorium) enriched with real examples and discussion.	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of a course website on the e-class platform for posting (a) notes, (b) internet links, (c) announcements, search tools and social networks	
MANAGEMENT OF TEACHING	Activity	Semester Workload
	Lectures	26
	Exercises	13
	Short works	40
	Individual study	71
	Course Total	150
STUDENT EVALUATION	The evaluation of the theoretical part of the course takes place in two phases: a) in the middle of the semester (6th-7th week) a written midterm exam is held (student participation is optional), b) at the end of the semester (after the completion of 13 lectures) a final exam is held, according to the Department's exam schedule. The evaluation of the exercises is done through the short individual works, after the implementation of each exercise, and delivered on a weekly basis.	

5. RECOMMENDED-BIBLIOGRAPHY

Books offered to students through the Eudoxus platform:

- Κατσιώτης Σ. και Π. Χατζοπούλου. 2015. Αρωματικά, Φαρμακευτικά φυτά και Αιθέρια Έλαια. Εκδόσεις Κυριακίδη. (Κωδικός ΕΥΔΟΞΟΣ: 86200855)
- Δορδάς Χ. 2012. Αρωματικά και φαρμακευτικά φυτά. Εκδόσεις Χριστίνας & Βασιλικής Κορδαλή Ο.Ε. (Κωδικός ΕΥΔΟΞΟΣ: 22768402)

- Κουτσός Θ. 2006. Αρωματικά και Φαρμακευτικά φυτά. Εκδόσεις Ζήτη Πελαγία & Σία (Κωδικός ΕΥΔΟΞΟΣ: 11015)
- Αθανασίου, Ζ. 2010. Μανιτάρια. Εκδόσεις: ΨΥΧΑΛΟΥ. (Κωδικός ΕΥΔΟΞΟΣ: 22768323)
- Βογιατζή – Καμβούκου Ε. 2004. Επιλογή Αρωματικών και Φαρμακευτικών φυτών. Εκδόσεις Χριστίνας & Βασιλικής Κορδαλή Ο.Ε. ISBN: 978-960-357-065-6. (Κωδικός ΕΥΔΟΞΟΣ: 77119822)

Books offered besides the Eudoxus platform:

- Shackleton, S, Shackleton, C., Shanley, P. 2011. Non-Timber Forest Products in the Global Context. Springer Eds. ISBN 978-3-642-17983-9
- Ciesla, W. 1998. Non-wood Forest Products from Conifers. Editor: Food and Agriculture Organization of the United Nations. Pp 124. ISBN 9251042128
- Διαμαντής, Σ. 1992. Τα μανιτάρια της Ελλάδας. Οι σπουδαιότεροι εδώδιμοι, δηλητηριώδεις και ξυλοσηπτικοί μύκητες της χώρας μας. Εκδόσεις ΙΩΝ.
- FAO. 1989. Small-scale harvesting operations of wood and non-wood forest products involving rural people. FAO Forestry Paper 87. Rome, FAO.
- Negi, S.S. 1992. Textbook of forest utilization (wood and non-wood forest products). Bishen Singh Mahendra Pal Singh, India.
- Vantomme, P., Markkula, A., Leslie, R.N. 2002. Non-wood forest products in 15 countries of tropical Asia: a regional and national overview. FAO Regional Office for Asia and the Pacific.
- Wickens, G.E. 1991. Management issues for development of non-timber forest products. Unasylva 165, Vol. 42, pp.3
- Χασιώτης, Χ. 2004. Αρωματικά και φαρμακευτικά φυτά. Διδακτικές σημειώσεις. ΤΕΙ Λάρισας, Καρδίτσα.