

## COURSE DESCRIPTION

### 1. GENERAL

<b>SCHOOL</b>	ENVIRONMENT, GEOGRAPHY AND APPLIED ECONOMICS		
<b>DEPARTMENT</b>	GEOGRAPHY		
<b>LEVEL OF COURSE</b>	Undergraduate		
<b>COURSE CODE</b>		<b>SEMESTER</b>	6th and 8th
<b>COURSE TITLE</b>	Management of Natural Disasters		
<b>STRUCTURE OF TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>NUMBER OF CREDITS ALLOCATED (ECTS)</b>
Lectures and Laboratory Classes		3	5
<b>TYPE OF COURSE</b>	OPTIONAL		
<b>PREREQUISITES</b>	-		
<b>LANGUAGE OF INSTRUCTION</b>	GREEK		
<b>COURSE OFFERED TO ERASMUS STUDENTS</b>	YES (in English if required)		
<b>(URL)</b>			

### 2. EXPECTED LEARNING OUTCOMES

#### Learning outcomes

Basic objective of the module is comprehension by the students of the processes of natural disasters and their impacts as well as human society responses and ways of coping with losses. The basic queries that the module attempts to give answer to are the following: Which are the root causes of natural disasters and which are the factors triggering chain-like disaster processes and domino effects? Is it possible that human societies affect catastrophic events and potential losses? Which are the policies, measures and actions that should be undertaken by human societies to prevent disasters, to mitigate losses, or even to recover as rapidly as possible? The module aims at supplying the students with knowledge, skills and the criteria which are necessary for disaster risk assessment, estimation of losses after manifestation of a disaster event, also for criticizing existing mitigation, preparedness, relief and recovery plans and for carrying out alternative management solutions.

### 3. COURSE CONTENTS

The thematic topics included in the module are: Natural disasters and the concepts of

hazard, risk and exposure - Natural and human-induced causes of disasters – The impacts of natural disasters and the concepts of vulnerability and resilience - Building, urban, social and economic vulnerability – Methods of vulnerability assessment – Areas in Greece and Europe which are prone to earthquakes, landslides, floods and forest fires (hotspots) – Vulnerability of the Greek cities to earthquakes and floods – Disaster management policies and plans for mitigation, preparedness, emergency, recovery and reconstruction – Examples from Greece, Turkey, Italy other European countries and USA.

#### 4. TEACHING AND ASSESSMENT METHODS

TYPE OF LECTURES	In class lectures, project tutoring		
ICT USE	ICT use, Internet use and e-class		
TEACHING STRUCTURE	<b>Activity</b>	<b>Hours per semester</b>	
	Lectures	28	
	Lab project	12	
	Assignment	40	
	Studying	45	
	TOTAL	125	
ASSESSMENT METHODS	<p>Assessment Language: Greek</p> <p>Assessment Methods</p> <ul style="list-style-type: none"> <li>- Written project (50%)</li> <li>- Oral presentation of the project (25%)</li> </ul>		

#### 5. RECOMMENDED READING

- Δελλαδέτσιμας Π.Μ. (2009), *Ασφαλείς Πόλεις*, εκδόσεις Εξάντας, Αθήνα.
- Μπεριάτος Η. και Π.Μ. Δελλαδέτσιμας (επιμ.) (2010), *Σεισμοί και Οικιστική Ανάπτυξη*, Εκδόσεις Κριτική ΑΕ, Αθήνα, σελ. 389-444.
- ΕΜΠ (Εθνικό Μετσόβιο Πολυτεχνείο, Εργαστήριο Χωροταξίας και Οικιστικής Ανάπτυξης) (1991-1995), *Εκτίμηση της Πυρικής Διακινδύνευσης των Δασικών Εκτάσεων και Αντιπυρικός-Χωροταξικός Σχεδιασμός Πρόληψης-Ετοιμότητας / Μελέτη Νομού Αττικής*, για λογαριασμό της ΓΓΕΤ, Αθήνα.
- ΕΜΠ (Εθνικό Μετσόβιο Πολυτεχνείο, Εργαστήριο Χωροταξίας και Οικιστικής Ανάπτυξης) (1993-1995), *Μετεγκατάσταση Πληθυσμού σε Ημι-μόνιμα Καταλύματα μετά από Σεισμό: Πολεοδομικές Παράμετροι, Κοινωνικές Επιπτώσεις και Τεχνολογία Βιομηχανικής Παραγωγής Μονάδων Κατοικίας*, για λογαριασμό του Οργανισμού Αντισεισμικού Σχεδιασμού και Προστασίας (ΟΑΣΠ) και της ΓΓΕΤ, Αθήνα.
- Σαπουντζάκη Κ. και Δανδουλάκη Μ. (2016), *Κίνδυνοι και Καταστροφές - Έννοιες και Εργαλεία Αξιολόγησης, Προστασίας, Διαχείρισης*, Heal Link, Αποθετήριο Κάλλιπος. <https://repository.kallipos.gr/handle/11419/6297>
- Σαπουντζάκη Κ. (επιμ.) (2007), *Το Αύριο Εν Κινδύνω – Φυσικές και Τεχνολογικές Καταστροφές στην Ευρώπη και την Ελλάδα*, εκδόσεις Gutenberg, Αθήνα.
- Σαπουντζάκη Κ. (2001), *Εκκένωση κτιρίων και Καταφυγή του Πληθυσμού σε Ασφαλείς Χώρους μετά από Σεισμό*, Εγχειρίδιο Νο3, έκδοση του Οργανισμού Αντισεισμικού

Σχεδιασμού και Προστασίας (ΟΑΣΠ) και του Ευρωπαϊκού Κέντρου Πρόληψης και Πρόγνωσης Σεισμών (στα ελληνικά και τα αγγλικά), Αθήνα.

<http://ecpfe.oasp.gr/sites/default/files/ekkp.pdf>

- Alexander D. (2002), *Principles of Emergency Planning and Management*, Oxford University Press, Oxford, New York.
  - Blaikie P, Cannon T, Davis I, Wisner B. (1994), *At Risk*, Routledge, London.
  - Christoplos I. (2003), "Actors in Risk", in *Natural Disasters and Development in a Globalizing World* (Pelling M, ed.), Routledge, London.
  - International Federation of Red Cross and Red Crescent Societies (2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2018), *World Disasters Report*.
  - Hewitt K. (1997), *Regions of Risk- A Geographical Introduction to Disasters*, Addison Wesley Longman Ltd, London.
  - Mitchell J.K. (1999), *Crucibles of hazard: Mega-Cities and Disasters in Transition*, UNU Press, Tokyo.
  - Pelling M. (2003), *The Vulnerability of Cities – Natural Disasters and Social Resilience*, Earthscan Publication Ltd., London.
  - Sjoberg L. (ed.) (1987), *Risk and Society: Studies in Risk Generation and Reactions to Risk*, Allen and Unwin, London.
  - Smith K. (2013), *Environmental Hazards-Assessing Risk and Reducing Disaster*, Sixth edition, Routledge, Londond *Methodological Review*, Publication Series of UNU-EHS, Bonn
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