COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF INFORMATION SCIENCES & TECHNOLOGY		
ACADEMIC UNIT	DEPARTMENT OF STATISTICS		
LEVEL OF STUDIES	1st Cycle (UNDERGRADUATE)		
COURSE CODE	**6246**	**SEMESTER**	**6th**
COURSE TITLE	**Biostatistics I**		

INDEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	4	7
Workshops		
Labs	2	

COURSE TYPE	Elective – Scientific Field
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK
IS THE COURSE OFFERED TO ERASMUS STUDENTS	
COURSE WEBSITE (URL)	https://www.dept.aueb.gr/en/stat/content/biostatistics-i-7-ects

(2) LEARNING OUTCOMES

Learning outcomes
At the end of the course the student will: Be familiar with the basic types of medical research. Be able to read a medical study and the corresponding scientific publication. Be able to perform basic analysis of medical data. The course motivates students to continue their studies in Biostatistics and to engage in the field.
General Competences

(3) SYLLABUS

Basic principles of epidemiology, morbidity and risk measures, odds ratio, diagnostic tests (Mantel-Hanzel, ROC curves, sensitivity – specificity), case control studies, introduction to clinical trials, sample size estimation, principles of epidemic models, Infectious disease control.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	**YES**
TEACHING METHODS	
STUDENT PERFORMANCE EVALUATION	Written examination at the end of the semester: 80% Practical Exercises: 20% Information is available at eclass

Activity	*Semester workload*
Lectures	52
Lab Exercise	20
Tutorial	18
Assignment	20
Self Study	65
Course Total	**175**

(5) ATTACHED BIBLIOGRAPHY

- Pagano M. και Gauvreau, K. (2000). Αρχές Βιοστατιστικής. (μτφ. Ρ.Δαφνή) Εκδόσεις ΕΛΛΗΝ Περιστέρι.
- Ιωαννίδης, Ι (2000) Αρχές Αποδεικτικής Ιατρικής: Επιδημιολογία, Δημόσια Υγιεινή, Μέθοδοι Έρευνας, Εκδόσεις Λίτσας, Αθήνα.
- Ντζούφρας Ι. (2010). Εισαγωγή στη Βιοστατιστική και την Επιδημιολογία. Διδακτικές Σημειώσεις. Τμήμα Στατιστικής, Οικονομικό Πανεπιστήμιο Αθηνών [διαθέσιμες μέσω http://eclass.aueb.gr]
- Δεμίρης Ν. (2012). Εισαγωγή στα Επιδημικά Μοντέλα. Διδακτικές Σημειώσεις. Τμήμα Στατιστικής, Οικονομικό Πανεπιστήμιο Αθηνών [διαθέσιμες μέσω http://eclass.aueb.gr]
- Rosner, B. (2010). Fundamentals of Biostatistics. 7th International edition, Brooks/Cole – Νέαέκδοσηπροσεχώς.
- DiekmannO., Heesterbeek, J.A.P. and Britton, T. (2012). Mathematical tools for understanding infectious disease dynamics. First edition, Princeton University Press.