



# UNIVERSITÀ DEGLI STUDI DI PALERMO

**Department: Economics and statistical Sciences**

**A.Y. 2014/2015**

## **DEGREE COURSE IN STATISTICAL SCIENCE**

### **Educational objectives**

The 2nd cycle degree course in statistics, in accordance with the specific objectives of the class and the indications stemming from the surveys about the placement of graduates in statistics (such as, for instance, the inter-university project STELLA), aims at training professionals with sound grounding in mathematics, probability, statistics and computer data processing, capable of operating in various applicative sectors with autonomy and responsibility and to fit in the labour market as qualified experts capable of producing, processing and analysing diverse information flows.

The educational framework of the course, having as access requirement an adequate grounding in informatics, mathematics, probability and statistics, is characterised by:

- The presence of a group of advanced courses in mathematics, probability and statistics subjects (including Econometrics), ensuring students full command of basic disciplines upon which subsequent theoretical-methodological and applicative statistics will be based;
- The attribution of quite wide credit intervals to the various disciplinary ambits required by regulations in force. This choice will enable the articulation of educational offer in specific interest areas, that differ from each other for 24-30 credits, and namely : one oriented to the economic, corporate and financial ambit, and the other oriented to the social, bio-statistical and environmental ambit;
- The attention to teaching methodologies, making sure that the solid theoretical grounding, based on frontal teaching, is integrated with laboratories, in which case studies and real problems will be discussed and applicative issues will be investigated, in which statistic is the indispensable tool of analysis. In this way, the development of an adequate critical analysis will be facilitated in students who, starting from sound methodological bases, will be brought to maintain a constant attention to the data formation process - according to definition and measurement concepts - and to a critical use of theories and methods with respect to the type and meaning of available data, turning them into information and therefore usable knowledge for decision making. Laboratory activities will also help to develop communication skills, through the preparation and presentation of written and/or oral reports.
- A particular attention to language skills, with a more advanced approach, and namely: a) a more advanced study of English for Specific Purposes (ESP) with respect to the 1st cycle; b) advanced study of spoken language, through the introduction of courses in English
- The possibility of carrying out an internship (stage) within companies or private or public organisations, with a duration equivalent to 6-8 credits;
- Final examination, consisting of an original dissertation about an issue agreed with a Professor; the preparation of the dissertation is awarded 24-30 credits and might be associated to the stage experience.

The educational regulations also provides for the verification of the correspondence between actual study load and the credits corresponding to individual subjects according to the line of the survey carried out within the CampusOne project.

### **Professional opportunities**

Healthcare companies: clinical, epidemiological and managerial areas;

Regional Healthcare departments: evaluation and epidemiology areas

Planning and experimentation units of companies in the biomedical, epidemiological, ecological-environmental areas;

Public and private research centres and institutions.

### **Final examination features**

It consists of an original paper related to one of the class specific disciplinary ambits. The dissertation topic might also be related to the stage experience; dissertations might be both on paper and on multimedia devices. The final examination is awarded with 24-30 credits, with the difference corresponding to 0-6 stage credits: i) for dissertations accompanied by stage or by a guided statistic consulting period, credits will be awarded as follows: 24 (final examination) + 6 (stage); ii) for dissertations without stage, but with a higher workload, credits will be awarded as follows: 30 (final examination) + 0(stage); the strong experimental and/or methodological character of the dissertation is the reason why 30 credits are awarded.

Subjects 1 ° year	CFU	Per	V\W	SSD	TAF
01238 - CALCULUS <i>Consiglio(PO)</i>	8	1	V \ 1	MAT/05	C
15511 - SAMPLING PLANS FOR SOCIAL SCIENCES <i>Giambalvo(PO)</i>	8	1	V \ 1	SECS-S/05	B
16438 - STATISTICAL MODELLING <i>Lovison(PO)</i>	10	1	V \ 1	SECS-S/01	B
15510 - ENGLISH FOR SPECIFIC PURPOSES <i>Romeo(PA)</i>	4	1	V \ 0		F
16603 - BUSINESS STATISTICS 1 <i>Cracolici(PO)</i>	6	2	V \ 1	SECS-S/03	B
02694 - ECONOMETRICS <i>Lo Cascio(PA)</i>	6	2	V \ 1	SECS-P/05	B
16475 - NON PARAMETRIC STATISTICAL METHODS <i>Chiodi(PO)</i>	8	2	V \ 1	SECS-S/01	B
16439 - STOCHASTIC PROCESSES <i>Adelfio(PA)</i>	8	2	V \ 1	MAT/06	B

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Subjects 2 ° year	CFU	Per	V\W	SSD	TAF
06634 - INTERNSHIP	6	1	G \ 0		F
05917 - FINAL EXAMINATION	24	3	G \ 0		E
Optional subjects	6				B
Optional subjects II	12				B
Optional subjects III	6				C
Free subjects	8				D

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## OPTIONAL SUBJECTS

Optional subjects	CFU	Per	V\W	SSD	TAF
16442 - CATEGORICAL DATA ANALYSIS <i>Sciandra(PA)</i>	6	1	V \ 1	SECS-S/01	B
14328 - EXPLORATIVE METHODS AND DATA-MINING <i>Plaia(PO)</i>	6	1	V \ 1	SECS-S/01	B
Optional subjects II	CFU	Per	V\W	SSD	TAF
16440 - BUSINESS STATISTICS 2 - INTEGRATED COURSE	12	2	V \ 1		
- MARKET ANALYSIS <i>Vassiliadis(RU)</i>	6	2	V \ 1	SECS-S/03	B
- STATISTICAL METHODS FOR QUALITY CONTROL <i>Vassallo(PA)</i>	6	2	V \ 1	SECS-S/03	B
16443 - SOCIAL STATISTICS 3 - INTEGRATED COURSE	12	2	V \ 1		
- STATISTICAL METHODS FOR EVALUATION <i>Boscaino(RU)</i>	6	2	V \ 1	SECS-S/05	B
- BIOSTATISTICS <i>Attanasio(PO)</i>	6	2	V \ 1	SECS-S/05	B
Optional subjects III	CFU	Per	V\W	SSD	TAF
14329 - BUSINESS SURVEYS <i>Guzzo(PA)</i>	6	2	V \ 1	SECS-P/07	C
02807 - HEALTH ECONOMICS <i>Li Donni(PA)</i>	6	1	V \ 1	SECS-P/03	C

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)