

## **Course curriculum for STAG18 Applied Multivariate Methods**

### **1. General information**

1. Name: Applied Multivariate Methods
2. Level: Basic (G1F)
3. Credit points: 7.5; ECTS-credits: 7.5
4. Approved by the Board of Directors at the Department of Statistics, School of Economics and Management, Lund University, 2014-10-20

### **2. Course placement within the educational system**

1. Subject: Statistics
2. This is a basic level course
3. The course is offered in English.

### **3. Learning outcomes**

On a general level the students should be able to understand the concept of analysing univariate and multivariate data.

On successful completion of the course the student

- will appreciate the range of multivariate techniques available,
- will be able to summarize and interpret univariate and multivariate data,
- will have an understanding of the link between multivariate techniques and corresponding univariate techniques,
- will be able to use the techniques appropriately, and draw appropriate conclusions.

### **4. Course content**

The course is divided into 6 blocks: Basic inferential statistics, analysis of variance, multiple linear regression, logistic regression, factor analysis and cluster analysis. The course covers theoretical, computational, and interpretive issues of these different types of analyses using computer solutions.

### **5. Teaching and assessment**

The course is designed as a series of lectures, computer exercises and assignments with reports. Grading is based on a written exam.

#### *Note*

The university views plagiarism very seriously, and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University for a specified period.

## 6. Grading scale

At the School of Economics and Management grades are awarded in accordance with a criterion-based grading scale A-F:

- A: Excellent
- B: Very good
- C: Good
- D: Satisfactory
- E: Sufficient
- F: Fail

Students have to receive a grade of E or higher in order to pass a course.

GRADE	CHARACTERISTIC	PERCENT	CRITERIA
A	Excellent	100-85	A distinguished result that is excellent with regard to the following aspects – theoretical depth, practical relevance, analytical ability and independent thought.
B	Very good	84-75	A very good result with regard to the above mentioned aspects.
C	Good	74-65	The result is of a good standard with regard to the above mentioned aspects and lives up to expectations.
D	Satisfactory	64-55	The result is of a satisfactory standard with regard to the above mentioned aspects and lives up to expectations.
E	Sufficient	54-50	The result satisfies the minimum requirements with regard to the above mentioned aspects, but not more.
F	Fail	49-0	The result does not meet the minimum requirements with regard to the above mentioned aspects.

## 7. Prerequisites

The students should have completed STAA30 Statistics Basic Course or an equivalent course.

## 8. Literature

See separate document.

***Literature***

Hair, Black, Babin & Anderson – Multivariate Data Analysis 7<sup>th</sup> Ed., Pearson Prentice Hall, New Jersey, USA.

Pallant - The SPSS Survival Manual 5<sup>th</sup> Ed, Open University Press