

Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|--------------------|----------|--------|----------|-----|--------|------|
| G213 | Applied Statistics | 3 | 4 | 0 | 0 | 4 | 6 |

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| Prerequisites | G114 |
| Admission Requirements | G114 |

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| Language of Instruction | French |
| Course Type | Compulsory |
| Course Level | Bachelor Degree |
| Objective | The objective of this course is to familiarize students with basic concepts and tools of statistical methodology. |
| Content | Sampling distributions, Estimation, Hypothesis tests, Tests of variance, Goodness-of-fit tests and Regression analysis. |
| References | Bernard Grais, "Statistique descriptive", 3eme edition, Dunod, Paris. Vincent Giard, "Statistiques Appliquées a la Gestion", Edition Economica, Paris. Paul Newbold, William L. Carlson, Betty Thorne, "Statistics for Business and Economics", 6th edition, Prentice Hall, Upper Saddle River, New Jersey, 2007 Roger C. Pfaffenberger, James H. Patterson, "Statistical Methods for Business and Economics", Irwin 2003 |

Theory Topics

| Week | Weekly Contents |
|------|--|
| 1 | Introduction. Sampling distribution |
| 2 | Sampling distributions of sample means |
| 3 | Sampling distributions of sample proportions |
| 4 | Estimation |
| 5 | Properties of Point Estimators |
| 6 | Estimation of confidence intervals |
| 7 | Sample size determination |
| 8 | Midterm exam |
| 9 | Hypothesis Testing |
| 10 | Tests of variance |
| 11 | Goodness-of-fit tests |
| 12 | Contingency tables |
| 13 | Regression analysis |
| 14 | Regression analysis |