



Faculty of Arts and Social Sciences

Statistics

Syllabus

Course Approval

The syllabus was approved by the Faculty Board of Arts and Social Sciences on 12 March 2013, and is valid from the Autumn semester of 2013 at Karlstad University.

Course Code: STGB03

Experimental Planning, 7.5 ECTS Credits

(Försöksplanering, 7.5 Swedish credit points)

Degree Level: Bachelor

Progressive Specialisation: G1F (First cycle, has less than 60 credits in first-cycle course/s as entry requirements)

Language of Instruction

The language of instruction is Swedish unless teachers or students are international, in which case the course is taught in English.

Prerequisites

A minimum of 30 credits in Statistics.

Major Field of Study

STA (Statistics)

Learning Outcomes

Upon completion of the course, students should be able to:

- relate previous knowledge of point estimates, interval estimates and hypothesis testing to more advanced situations by means of test plans,
- conduct completely randomised testing, either blocked or unblocked,
- conduct various forms of factorial testing,
- give an account of blocking and correlation in factorial testing,
- explain the connection between models of various types,
- perform a basic model control, and
- use simple response surfaces and hierarchical models.

Content and Form of Instruction

The course covers randomised testing, randomised block testing, sample testing, Latin and Greek-Latin squares, factorial testing with two- and three-factor levels, effects of factorial correlation, fractional factorial testing,

response surfaces and split-plot testing.

Reading List

See separate document.

Examination

Examination is in the form of written assignments and a final written exam.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course. The course grade reflects the examination result.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

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