JÖNKÖPING UNIVERSITY
Jönköping International Business School

COURSE SYLLABUS
Business Statistics 1, 7.5 credits

Business Statistics 1, 7,5 högskolepoäng

Course Code:	FSFG13	**Education Cycle:**	First-cycle level
Confirmed by:	Council for Undergraduate and Masters Education Jan 4, 2013	**Disciplinary domain:**	Technology
Revised by:	Director of Education Oct 31, 2024	**Subject group:**	ST1
Valid From:	Sep 1, 2025	**Specialised in:**	G1N
Version:	7	**Main field of study:**	Statistics

Intended Learning Outcomes (ILO)

On completion of the course the student will be able to:

Knowledge and understanding

1. Discuss the role of centrality measures vs measures of spread

2. State the difference between point estimates and interval estimates

3. Explain the concept of randomness

4. Explain the duality between hypothesis tests and confidence intervals

5. Discuss the meaning- and use of the central limit theorem

Skills and abilities

6. Present and summarize data graphically

7. Calculate elementary probabilities

8. Test statistical hypotheses concerning measures of centrality

Judgement and approach

9. Assess the general usefulness/weaknesses of the statistical analyses treated in the course

Contents

Some major topics covered in this course are:
- Descriptive statistics,
- Probability,
- Random variables,
- The normal distribution,
- Sampling and sampling distributions,
- Confidence intervals,
- Hypothesis testing.

Analysis of variance or contingency table analysis may also be covered.

Connection to Research and Practice
This course covers essential statistical topics necessary to understand any research reports

and/or articles. The students learn to compile, calculate summary measures, and present different types of data. The aim is also to provide the ability to make simpler probability calculations and, based on statistical assessments draw conclusions about unknown characteristics of different types of populations. The lectures and exercises provided involves many practical examples, and the computer assignment consists of applying the skills and abilities learned throughout the course to real-world data; presenting and evaluating different types of data and to infer properties of populations parameters, e.g., testing hypotheses and deriving estimates.

Type of instruction

Lectures and computer labs.

The teaching is conducted in English.

Prerequisites

General entry requirements and English 6 or Proof of English proficiency is required, Mathematics 3b or 3c, Civics 1b eller 1a1+1a2 and required grade Passed. Exemption from the requirement of having Swedish course B is given.

Examination and grades

The course is graded A, B, C, D, E, FX or F.

Individual written exam (ILO 1-9) representing 6 credits.
Group written assignment (ILO 1-9) Pass/Fail, representing 1.5 credits.

Registration of examination:

Name of the Test	Value	Grading
Individual written exam[I]	6 credits	A/B/C/D/E/FX/F
Group written assignment[I]	1.5 credits	U/G

[I] All parts of compulsory examination in the course must be passed with a passing grade before a final grade can be set. The final grade of the course is determined by the sum total of points for all parts of examination in the course (0-100 points). Grade is set in accordance to JIBS grading policy.

Course evaluation

It is the responsibility of the examiner to ensure that each course is evaluated. At the outset of the course, evaluators must be identified (elected) among the students. The course evaluation is carried out continuously as well as at the end of the course.

On the completion of the course the course evaluators and course examiner discuss the course evaluation and possible improvements. A summary report is created and archived. The reports are followed up by program directors and discussed in program groups and with relevant others (depending on issue e.g. Associate Dean of Education, Associate Dean of faculty, Director of PhD Candidates, Dean and Director of Studies).

The next time the course runs, students should be informed of any measures taken to improve the course based on the previous course evaluation.

Other information

Academic integrity

JIBS students are expected to maintain a strong academic integrity. This implies to behave within the boundaries of academic rules and expectations relating to all types of teaching and examination.

Copying someone else's work is a particularly serious offence and can lead to disciplinary action. When you copy someone else's work, you are plagiarizing. You must not copy sections of work (such as paragraphs, diagrams, tables and words) from any other person, including another student or any other author. Cutting and pasting is a clear example of plagiarism. There is a workshop and online resources to assist you in not plagiarising called the Interactive Anti-Plagiarism Guide.

Other forms of breaking academic integrity include (but are not limited to) adding your name to a project you did not work on (or allowing someone to add their name), cheating on an examination, helping other students to cheat and submitting other students work as your own, and using non-allowed electronic equipment during an examination. All of these make you liable to disciplinary action.

Course literature

Compulsory literature

Anderson, Sweeney, Freeman, Williams and Shoesmith. Statistics for Business and Economics. South-Western CENGAGE learning. Latest edition.