

Quantitative Methods, 7,5 HE credits

Kvantitativa metoder, 7,5 hp

Established: 2023-06-01

Established by: School of Business, Economics and IT

Applies from: V24

Learning outcomes

After completing the course the student is expected to:

Knowledge and understanding

- have the fundamental knowledge of the mathematical and statistical methods that are essential to understand microeconomic, macroeconomics and financial theories

Skills and abilities

- can quantitatively apply mathematical and statistical methods to real world economic and financial problems

Judgement and approach

- be able to critically discuss methods and models and to make assessments of and understand solutions to various types of economic, financial and sustainability problems.

Entry requirements

Economics Basic Level, 22,5 HE credits

The forms of assessment of student performance

Individual assignment case and individual written exam.

Course contents

This is an applied course useful in studying microeconomics, macroeconomics and finance. Examples of the application in microeconomics include elasticity, the concept of marginal changes, profit maximization, cost minimization as well as consumption and production surpluses. The application in macroeconomics includes marginal propensities of consumption and saving as well as solution for equilibrium in goods and/or money markets.

The application in financial economics includes, for example, interest-rate compounding in investment strategies. Hence, examples of the essential mathematical, statistical and econometrical topics used in this course are:

- algebra
- single and multiple variable functions
- derivatives and differentiation
- single and multiple variable optimization
- descriptive statistics
- regression analysis.

Other regulations

Course grading: F/Fx/E/D/C/B/A - Insufficient, Insufficient- more work required before the credit can be awarded, Sufficient, Satisfactory, Good, Very Good, Excellent

Course language: The teaching is conducted in English.

General rules pertaining to examination at University West are available at www.hv.se.

If the student has a decision/recommendation on special support due to disability, the examiner has the right to examine the student in a customized examination form.

Cycle

First cycle

Progressive specialization

G1F - first cycle, has less than 60 credits in first-cycle course/s as entry requirements

Main field of study

Economics