

## **Quantitative Methods, 7,5 HE credits**

*Kvantitativa metoder, 7,5 hp*

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Established: 2018-03-08

Established by: School of Business, Economics and IT

Applies from: H18

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### **Learning outcomes**

After completing the course the student is expected to:

1. *Knowledge and understanding*

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

2. *Skills and abilities*

- have the ability to quantitatively apply mathematical and statistical methods to real world economic and financial problems

3. *Judgement and approach*

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

### **Entry requirements**

Economics Basic Level, 22,5 HE credits

### **The forms of assessment of student performance**

Individual assignment case and 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](http://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