Faculty of Arts and Social Sciences
Economics

Syllabus

Portfolio analysis

Course Code:	NEAD34
Course Title:	Portfolio analysis *Portföljval*
Credits:	7.5
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has only first-cycle course/s as entry requirements (A1N)

Major Field of Study:
NAA (Economics)

Course Approval
The syllabus was approved by the Faculty of Arts and Social Sciences 2025-09-04, and is valid from the Spring semester 2026 at Karlstad University.

Prerequisites
90 ECTS credits in Economics and 15 ECTS credits in Mathematics or Statistics, plus upper secondary level English 6 or English level 2, or equivalent

Learning Outcomes
Upon completion of the course, students should be able to:
1. describe how financial markets and institutions function and the role they play in a market economy,
2. give an account of different models for pricing basic financial instruments such as bonds and stocks,
3. give an account of various models in portfolio selection theory,
4. apply different techniques for evaluating portfolio management,
5. construct optimal securities portfolios and portfolios with a given risk exposure,
6. calculate the risk premiums and discount rates of individual firms, and
7. apply theories for financial risk control and, where applicable, immunise bond portfolios against interest rate risks.

Content
The course covers theories of pricing financial assets in well-developed capital markets. The foundation of these pricing theories is portfolio selection theory, which is used to derive so-called optimal securities portfolios, that is, how an investor should combine a large number of financial assets to achieve the best possible balance between return and risk. The portfolio selection models addressed include CAPM and APT, as well as their empirical counterparts, the Single-Index and Multi-Index models. The course also covers how financial institutions can protect (immunise) their securities portfolios against various types of risks, as well as techniques for evaluating portfolio management performance. These theories are given practical implementation during the course through a series of computer-based exercises where students learn to construct securities portfolios and evaluate portfolio management results. The course also includes writing an independent study on a current topic in financial economics.

Reading List
See separate document.

Examination
Assessment is based on a written independent project presented and discussed in a seminar.
Learning outcomes 1-4 are also assessed based on a written exam.
Learning outcomes 5-7 are also assessed based on laboratory work in groups.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

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

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 evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate
A course certificate will be provided upon request.

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