Module Description

WI000231: Asset Management

Chair of Financial Management and Capital Markets (Prof. Kaserer)

Module level: Master
Language: English
Module duration: one semester
Occurrence: winter semester

Credits*: 6
Total number of hours: 180
Self-study hours: 120
Contact hours: 60

* The number of credits can vary depending on the corresponding SPO version. The valid number is always indicated on the Transcript of Records or the Performance Record.

Description of achievement and assessment methods:
The module examination is based on a written exam (120 minutes). The exam consists of calculations, multiple choice questions as well as open questions. By answering questions in multiple choice or text form, students have to show their understanding of the theory behind Asset Management (e.g. concept of utility and the calculation of basic utility measures, portfolio selection under various constraints, determinants of the capital asset pricing model and other factor models, application of international asset pricing models). By performing calculations and elaborating on theoretical considerations, students have to demonstrate their ability to practically work with the methods presented in the course. Students are allowed to use a 5 page DIN A4 formula gallery as well as a standard normal distribution table at the course and during the exam.

Exam type: not specified
Exam duration (min.): not specified
Possibility of re-taking: In the next semester: Yes
At the end of the semester: No

Homework: No
Lecture: No
Conversation: No
Written paper: No

(Recommended) requirements:
WI000219 "Financial Management" (Recommended)
MA9712 "Introductory Statistics" (Recommended)
MA9711 "Introductory Mathematics" (Recommended)

Contents:
The target of the course is to familiarize students with the concept of Asset Management from both, a theoretical and practical perspective. The course provides the theoretical foundation that is required to understand typical problems in Asset Management and illustrates how to solve these problems effectively by means of the appropriate tools (e.g. Excel Solver).

The following contents are addressed:

- Utility Theory and decisions under uncertainty
- Theory and application of basic models of portfolio theory with a particular focus on portfolio optimization under various constraints in the Markowitz mean-variance framework
- Theory and application of asset pricing models (e.g. Capital Asset Pricing Model, Arbitrage Pricing Theory)
- International asset pricing models (e.g. International Capital Asset Pricing Model) and economic multifactor models
in an international context
- Forecasting asset returns
- Theory and application of conditional asset pricing
- Global asset allocation
- Alternative allocation concepts and asset classes

**Study goals:**
After successful completion of the module, students (1) understand the concept of utility theory (utility functions and link to risk attitudes) and can (2) calculate basic utility measures (absolute risk aversion, relative risk aversion, expected utility, certainty equivalent, risk premium); Students can also (3) explain and apply the basic models of portfolio theory, i.e. they can calculate the optimal portfolio allocation in the Markowitz mean-variance framework for an arbitrary set of asset returns under various constraints. Moreover, students (4) understand the fundamental concept of the Capital Asset Pricing Model, can (5) apply the model and its variants introduced in the course and also recognize the shortcomings of this model. Students learn (6) to use other asset pricing models and when to apply them. Moreover, students get insights into the theory, process and methods of asset management in an international environment and they are able (7) to apply international asset pricing models in typical business cases with an international context.

**Teaching and learning methods:**
The module combines various learning methods:
- Basic knowledge, theoretical concepts and practical examples will be provided through the lecture.
- Controversial discussions and active participation in class are encouraged to deepen understanding of the concepts presented.
- In the exercises, students will apply their theoretical knowledge to concrete demonstration of how to apply portfolio optimization on real-world data by using Excel
- Students will get insights into practice via several guest lecture

**Media formats:**
Presentation slides, white board

**Literature:**


**Responsible for the module:**
Kaserer, Christoph; Prof. Dr. rer. pol. habil.: christoph.kaserer@tum.de

**Courses (Type, SH) Lecturer:**
240988887 Exercise Asset Management (WI000231) (2SWS P, WS 2016/17) Kaserer C, Oertmann P

240991266 Asset Management (WI000231) (2SWS L, WS 2016/17) Huber D [L], Kaserer C, Oertmann P

For further information about this module and its allocation to the curriculum see: https://campus.tum.de/tumonline/wbModHb.wbShowMHBReadOnly?pKnotenNr=463793

Generated on: 11.07.2017 07:46