



FH Salzburg

Course Syllabus

Study programm	Business Management
Course code	BWIB2POPIL
Course title	Portfolio Optimization
Term / year of study when the course is delivered	Spring/Summer Term
Cycle	1st cycle
ECTS credits / contact hours	5 / 28
Teaching units (hours/week - SWS)	2
Course type	ILV (Interactive lecture)
Prerequisites	B2 level in English, basic understanding of organizational structures and management functions
Language of instruction	English
Course content	<p>The course aims to introduce students to the theoretical framework and empirical methods of portfolio optimization. Contents of the course include:</p> <ul style="list-style-type: none">• Modern portfolio theory• Parametrization of return, risk and dependencies• Portfolio optimization• Portfolio simulations<ul style="list-style-type: none">○ Historical simulation○ Monte Carlo simulation• Implications and recommendations <p>This lecture focuses on the practical application of the taught approaches. Further the course provides a</p>

Technology
Health
Media

	platform to discuss the current developments in financial markets.															
Learning outcomes	<p>By the end of this course, students are able to:</p> <ul style="list-style-type: none"> • Understand and apply the methods of portfolio theory • Deal with the most important questions of the parameterization of the models • Perform parametrizations of models using current capital market data using Excel • Carry out optimizations with different constraints using Excel • Critically question the results • Understand common simulation methods 															
Learning methods	Mixture of lectures, in-class participation, group work, and case studies using Excel															
Assessment methods & criteria	<ul style="list-style-type: none"> • Group presentation of a portfolio optimization process conducted over several weeks • Seminar paper about a portfolio optimization process conducted over several weeks • In-class participation 															
Grading Scale	<table> <tr> <td>1</td> <td>Excellent</td> <td>100 - 93%</td> </tr> <tr> <td>2</td> <td>Good</td> <td>83 - 92%</td> </tr> <tr> <td>3</td> <td>Good average</td> <td>70 - 82%</td> </tr> <tr> <td>4</td> <td>Below average</td> <td>50 - 69%</td> </tr> <tr> <td>5</td> <td>Insufficient</td> <td>< 50%</td> </tr> </table>	1	Excellent	100 - 93%	2	Good	83 - 92%	3	Good average	70 - 82%	4	Below average	50 - 69%	5	Insufficient	< 50%
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4	Below average	50 - 69%														
5	Insufficient	< 50%														
Recommended resources	<ul style="list-style-type: none"> • Benninga, S. (2014): Financial modeling. 4th ed. MIT Press • Brown, K.C., Reilly, F.K., Leeds, S. (2018): Investment Analysis and Portfolio Management. 11th ed. Cengage Learning 															
Attendance	75%															

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