

Valid for 2023.FS

Module Name: Risk Management	
Module Code	w.MA.XX.RM-PiE.19HS
Module Description	As the financial market crisis of 2007-2009 has shown, the banking industry was ill-prepared to handle such crises. More forward-looking and effective risk management is of utmost importance for financial institutions. The strategic importance of risk management will remain crucial and might create comparative advantages for banks in global markets. This module introduces students to the complexities of risk management as well as its basic organizational setups, models, and management techniques. Students will gain a comprehensive overview of the management of market risk, liquidity risk, credit risk, and operational risk, as well as of the regulatory developments and capital requirements (Basel I, II, and III). After successful completion of this module, students will have a solid foundation of risk management.
Program and Specialization	Banking and Finance (PiE)
Legal Framework	Academic Regulations MSc in Banking and Finance dated 29.09.2011, Appendix to the Academic Regulations for the degree program in Banking and Finance, first adopted on 28.08.2012
Module Category	Module Type: Compulsory
ECTS	6
Organizational Unit	W Institut für Wealth & Asset Management
Module Coordinator	Jan-Alexander Posth (posh)
Deputy Module Coordinator	Orcun Kaya (kaya)
Prerequisite Knowledge	Students have a Bachelor's degree in Business Administration with a specialization in Banking and Finance. They have some basic knowledge of bank risk management. In particular, students: <ul style="list-style-type: none"> • Are able to classify and describe bank risk • Know the typical steps followed in a risk management process (identification, measurement, aggregation, management and control, reporting, and monitoring) • Know the basics of risk measurement, such as value at risk and scenario analysis • Know the main features and the structure of regulatory requirements for the risk management of banks (Basel III, finalization of Basel III) • Have a basic knowledge of the regulatory standard approaches for assessing the capital requirements that cover banking risks. <p>Basic literature: Michel Crouhy, Dan Galai, Robert Mark; (2013). The Essentials of Risk Management; 2nd edition. New York: McGraw-Hill. ISBN 978-0071818513</p>
Contribution to Program Learning Goals (Affected by Module)	§ Professional Competence § Methodological Competence § Social Competence § Self-Competence
Contribution to Program Learning Objectives	Professional Competence § Knowing and Understanding Content of Theoretical and Practical Relevance § Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance § Evaluate Content of Theoretical and Practical Relevance Methodological Competence § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence § Written Communication § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective Self-Competence § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change
Module Learning Objectives	Students... § understand the importance of risk management in banking in general. § understand market risk management, credit risk management, and operational risk management.

	§ have the ability to identify the relevant risk categories banks are exposed to. § know and can apply advanced methods of risk measurement and quantification, i.e., VaR and hypothesis testing on VaR, sensitivity calculation ("Greeks"), scenario analysis, back- and stress-testing. § know the specifics of operational risk modelling and are able to apply this knowledge in a banking context. § know the specifics of credit risk modelling and management and are able to apply this knowledge in a banking context. § know the specifics of market as well as treasury (ALM) related risks concerning modelling and management and apply this knowledge in a banking context. § are able to apply the methods learned to specific cases and are, therefore, qualified to work in risk management teams of banks. § are able to contribute to the improvement of existing and the development of new operational and managerial processes in risk management. § know about the regulatory developments and capital requirements (Basel III, finalization of Basel III).																						
Module Content	§ Risk Management in Banks § Market Risk Management § Treasury Management § Credit Risk Management § Operational Risk Management																						
Links to other modules	The content of this module is linked to the following modules: w.MA.XX.IN-PiE.19HS w.MA.XX.PMA-PiE.19HS w.MA.XX.QIS-PiE.19HS																						
Methods of Instruction	§ Lecture § Interactive Instruction § Application Tasks § Case Studies § Exercises § Literature Review	Social Settings Used: § Individual Work § Group Work																					
Digital Resources	§ Reader § Teaching Videos § Teaching Materials § Practice and Application Exercises (with Key) § Case Studies (with Key) § Multiple Choice Tests § Spreadsheets, case studies, specialized software provided via Moodle																						
Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study																				
Lecture	72 h	-																					
Excercise	-	-																					
Project Work	-	-																					
Seminar	-	-																					
Total	72 h	0 h	108 h																				
Performance Assessment	<table border="1"> <thead> <tr> <th>End-of-module exam</th> <th>Form</th> <th>Length (min.)</th> <th>Weighting</th> </tr> </thead> <tbody> <tr> <td>Written exam</td> <td>Closed book</td> <td>90</td> <td>100,00 %</td> </tr> <tr> <td>Permitted Resources</td> <td>Approved calculator according to "Guidelines on Supplementary Materials"</td> <td colspan="2">With dictionary</td> </tr> <tr> <th>Others</th> <th>Assessment</th> <th>Length (min.)</th> <th>Weighting</th> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>Students are not allowed to revise and resubmit performance assessment tasks.</p>			End-of-module exam	Form	Length (min.)	Weighting	Written exam	Closed book	90	100,00 %	Permitted Resources	Approved calculator according to "Guidelines on Supplementary Materials"	With dictionary		Others	Assessment	Length (min.)	Weighting	-	-	-	-
End-of-module exam	Form	Length (min.)	Weighting																				
Written exam	Closed book	90	100,00 %																				
Permitted Resources	Approved calculator according to "Guidelines on Supplementary Materials"	With dictionary																					
Others	Assessment	Length (min.)	Weighting																				
-	-	-	-																				
Classroom Attendance Requirement	Mandatory Attendance: None																						
Language of Instruction/Examination	English																						
Compulsory Reading	§ Hull, J. (2015). Risk Management and Financial Institutions. ISBN 978-1118955949. (selected chapters). § Wilson, T. (2015). Value and Capital Management. ISBN 978-1118774632. (selected chapters provided as readers). § Dermine, J. (2015). Bank Valuation – Value-Based Management. 2nd edition. McGraw-Hill. ISBN 978-0071839488. (selected chapters provided as readers). § Bessis, J. (2015). Risk Management in Banking. 4th edition. West Sussex: Wiley. ISBN 978-1118660218. § Literature provided as readers																						

Recommended Reading	§ Stulz, R. (2003). Risk management and derivatives. Thomson South-Western, Mason OH. ISBN 978-0538861014. (Chapter 3). § Nocco, B. & Stulz, R. (2006). Enterprise risk management: Theory and practice. J. of Applied Corporate Finance, 18 (4), § Admati, A. and Hellwig, M.; 2013; The parade of the bankers' new clothes continues: 23 flawed claims debunked; discussion paper
Comments	<ul style="list-style-type: none"> • Recommended references might become compulsory if highlighted as such during a lecture or exercise.