

## **COURSE SYLLABUS**

### **COMPUTER-AIDED ANALYSIS OF FINANCIAL MARKETS**

### **(VALUE AT RISK)**

Semester:	Summer 2020
Code and credits:	AQM2202/30 contact hours
Time and venue:	See the complete schedule sheet
Lecturer:	Eddy Junarsin, Ph.D., PFM®, CFP®
Office:	To be announced
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Office hours:	Tuesdays 10:00-11:15 a.m., or with an appointment

#### **Course Description**

Risk is costly, particularly to executives and business owners facing inherent risk in their professional lives. Optimizing the cost of risk would increase the value of a firm. However, risk minimization, either by the self-managed method or by the risk-transfer approach, is not a trivial process to implement. If an executive decides to manage the cost of risk herself, she has to estimate direct and indirect costs pertaining to possibly risky events or occurrences. On the other hand, if the executive transfers the risk to a third party, she has to load in insurance premium as compensation for the insurer, comprised of administrative fees and the insurer's business return.

Hence, risk management course is of importance for dealing with business and professional lives. This course is designed to introduce and discuss various risk management concepts, tools, and techniques in a global context. Using an integrated approach, this course emphasizes discussion on the design and implementation of risk management practices. Accordingly, it purports to help students understand and carry out various state-of-the-art risk management theories and practices as well as their future advances (such as loss control, loss financing, and internal risk reduction mechanisms).

#### **Objectives**

1. Provide students with a comprehensive perspective on risk management and insurance concepts, tools, and techniques;
2. Develop analytical and integrative thinking in understanding and implementing risk management practices;
3. Increase students' aspirations through an experiential approach, especially in the completion of assignments;
4. Practice communication skills intertwined with risk management topics; and

5. Enhance student creativity.

### Reading Materials

Saunders, A. and Cornett, M. (2017), *Financial Institutions Management: A Risk Management Approach*, 9<sup>th</sup> ed., McGraw-Hill, Boston, MA.

Hull, J. (2015), *Risk Management and Financial Institutions*, 4<sup>th</sup> ed., John Wiley & Sons, Hoboken, NJ.

Bruner, R., Eades, K., and Schill, M. (2014), *Case studies in finance: Managing for corporate value creation*, 7<sup>th</sup> ed., McGraw-Hill, New York, NY.

Fraser, J. and Simkins, B., and Narvaez, K. (2015), *Implementing Enterprise Risk Management: Case Studies and Best Practices*, John Wiley & Sons, Hoboken, NJ.

Other relevant articles and case studies.

### Class Requirements

**Presence.** You are required to attend at least 80% of total lectures held. Any violation against this rule may cause the ineligibility to get a final grade.

**Class participation.** You are highly expected to contribute ideas, thoughts, experiences, and arguments to class discussion. Although overviews of key points and issues will be provided, I strongly recommend that you comprehend materials in details, raise questions and ideas, and create a “lively” class, meaning that you must read and prepare readings assigned prior to coming to the class.

**An experiential approach.** Continuously and consistently, you are assigned to construct experiential observations and solve managerial cases or problems, and subsequently report findings to the professor.

**Internet exploration.** You are encouraged to harness the advancement of information and communications technology (ICT) in exploring knowledge and opportunities. Remember that in today's competitive environment, a smart person is not one who could answer all questions, but rather someone who knows where to find solutions.

### Assessment

Item	Weight	Due Date
Class participation	30%	The end of lecture
Assignments	30%	Submission schedule
Final paper	40%	To be announced

**Assignments.** You will be randomly distributed into pairs. Besides functioning as a discussion forum, the group will analyze cases and/or facts assigned by the professor,

and present them before all participants. Cases might be inspired by or taken from various sources, including the textbook.

Late submissions will not be accepted without a prior approval of the professor. All requests for extension should be directed to the professor by e-mail (john.junarsin@ugm.ac.id). An extension will be granted for medical reasons upon receipt of a medical certificate, or in exceptional circumstances in consultation with the professor.

**Final paper.** An individual final paper purports to examine your knowledge and mastery of concepts learned throughout the lectures.

### Learning Goals

The completion of this course is expected to contribute to the following learning goals and objectives:

Learning Goal	Learning Trait(s)	High	Med	Low	Performance Measurement(s)
1. Students demonstrate the ability to communicate	1.1. Students demonstrate the ability to produce written reports	√			Assignments Stock trading reports
	1.2. Demonstrate the ability to deliver oral presentation	√			Class participation and presentations
2. Students demonstrate the ability to work in team	2.1. Students demonstrate the ability to work in team	√			Assignments Class presentations
3. Students have understanding about ethics	3.1. Students demonstrate the ability to identify issues of ethics		√		Class participation and presentations
	3.2. Students demonstrate the ability to make a choice based on ethical considerations.		√		Class participation and presentations
4. Students demonstrate ability to comprehend knowledge (in the field) of	4.1. Students demonstrate the ability to comprehend knowledge (in the field) of management	√			Exams Assignments Stock trading reports
5. Students demonstrate the ability to lead others	5.1. Students demonstrate the ability to lead others		√		Assignments Class presentations

### Course Schedule

Session	Topic	Reading(s)
1	Syllabus	-
	Risk management overview	Bricks
2	Why are financial institutions special?	Chapter 1
	Risks of financial institutions	Chapter 7

3	Interest rate risk I	Chapter 8
4	Interest rate risk II	Chapter 9
5	Credit risk I	Chapter 10
6	Credit risk II	Chapter 11
7	Liquidity risk	Chapter 12
8	Foreign exchange risk	Chapter 13
9	Market risk	Chapter 15
10	Technology and other operational risks	Chapter 17
11	Capital adequacy	Chapter 20
12	Futures and forwards	Chapter 22
13	Options, caps, floors, and collars	Chapter 23
14	Swaps	Chapter 24
	Course wrap-up	-
15	Case 1: Value and risk: Enterprise risk management at Statoil	Bricks
	Case 2: Carrefour S.A.	
<b>Final Exam</b>		

### Grading Systems

Grade	A	B	C	D	F
%	80-100	70-79	60-69	50-59	0-49

- D (50-59) means that you pass the minimum skills required.
- C (60-69) means that you are credited for some better performance than merely minimum requirements.
- B (70-79) indicates that you complete this course with distinction, and have shown evidence of insightful thoughts.
- A (80-100) indicates that you have exhibited superb and creative performance during the learning process, and achieved excellent overall results.

### Plagiarism

Pforzheim University conforms to a Code of Conduct that highly honors honesty in assessment. You must be aware of the regulations concerning misconducts, which prohibit the following behaviors or actions:

- No part of your work is copied from other people's work, except where due acknowledgements are made,
- No part of your work is written by another person, except where such a collaboration has been endorsed by the professor, and
- No part of your work has been submitted for assessment in another course, both within Pforzheim University and at other universities, except where it has been authorized by the professor.