COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Finance and Statistics		
ACADEMIC UNIT	Department of Banking and Financial Management		
LEVEL OF STUDIES	**Undergraduate**		
COURSE CODE	ΧΡΜΔΠΚ01	SEMESTER	6ο & 8ο
COURSE TITLE	Credit Risk Management		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS
Lectures	4	7.5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Elective course
PREREQUISITE COURSES:	No
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

After completing the teaching cycle of the course, students will be able to:

- Understand the concepts of credit risk and market risk of financial institutions and the importance of measuring and managing these risks.
- Understand regulatory frameworks and capital requirements of supervisory authorities (e.g. Basel, ECB Guide to Internal Models – "EGIM").
- Understand the trade-off between returns and risk.
- Understand how to calculate the volatility and correlation of portfolio's instruments.
- Be able to calculate credit risk and market risk through the standardized approach.
- Understand how to estimate market risk using various statistical methods (parametric, non-parametric and semi-parametric).
- Understand how to estimate the credit risk using the measures of the expected loss (ECL), i.e. the probability of default (PD), the loss given default (LGD) as well as exposure at default (EAD).

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

- Search, analysis and synthesis of data and information, using the necessary technologies
- Decision making
- Autonomous working assignment
- Grouped working assignment and case studies

(3) SYLLABUS

- Introduction to the concepts of financial risks (focusing on credit risk and market risk).
- The role of regulatory frameworks and supervisory authorities in financial institutions.
- Trade-off between returns and risk.
- Introduction to the estimation of volatility and correlation.
- Estimation and prediction of volatility (EWMA, GARCH models) using a programming language (e.g., MATLAB)
- Calculation of market risk measures (e.g., VaR, Expected Shortfall) with parametric, non-parametric and semi-parametric methods using a programming language (e.g., MATLAB).
- Market Risk Backtesting using a programming language (e.g., MATLAB).
- Introduction to credit risk and credit ratings.
- Theoretical background and estimation of the expected loss (ECL), using the probability of default (PD), the loss given default (LGD) as well as the exposure at default (EAD).
- Empirical applications on the measurement of credit risk and market risk using the standardized approach and internal models based on the regulatory framework.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Laboratory education
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	

Activity	*Semester workload*
Lectures	52
In class assignments	26
Study and analysis of bibliography	26
Laboratory practice	26
Standalone studying	57.5
Course total	***187.5***

STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	Students will be assessed through a written exam, a working assignment and participation in the case studies.

(5) ATTACHED BIBLIOGRAPHY

- Altman, E. I. (2000). Predicting financial distress of companies: revisiting the Z-score and ZETA models. Stern School of Business, New York University, 9-12.
- Bauwens, L., Laurent, S. and Rombouts, J. V. (2006). Multivariate GARCH models: a survey. Journal of Applied Econometrics, 21(1), 79-109.
- Christoffersen, P. (2011). Elements of Financial Risk Management, Academic Press.
- Degiannakis, S. and Xekalaki, E. (2010). ARCH Models for Financial Applications, Wiley, New York.
- Engle, R. (2001). GARCH 101: The use of ARCH/GARCH models in applied econometrics. Journal of Economic Perspectives, 15(4), 157-168.
- Hull, J. (2015). Options, futures, and other derivatives, 9th edition, Prentice Hall.
- Jorion, P. (2006). Value at risk. McGraw-Hill.
- Jorion, P. (2009). Risk Management Lessons from the Credit Crisis. European Financial Management, 15(5), 923-933.