

### MODULE SPECIFICATION

Part 1: Information						
Module Title	Credit Risk Analysis and Management					
Module Code	UMAD5W-15-3		Level	Level 6		
For implementation from	2020-21					
UWE Credit Rating	15		ECTS Credit Rating	7.5		
Faculty	Faculty of Business & Law		Field	Accounting and Finance		
Department	FBL [	Dept of Accounting Eco	onomics & Finance			
Module type:	Standard					
Pre-requisites		None				
Excluded Combinations		None				
Co- requisites		None				
Module Entry requirements		None				

#### Part 2: Description

**Overview**: Overall, the purpose of this module is to introduce students to the concept of credit risk and acquaint them with the theoretical as well as practical applications with a view to efficiently analysing, reporting and managing credit risk.

**Educational Aims:** The module aims to enable students to develop an appreciation for the subject area of credit risk, its potential and practical significance and inspire students to actively pursue research in this area and remain up-to-date with the rapid developments in the various constituent areas of credit risk.

In addition, the educational experience may explore, develop, and practise, but not formally discretely assess, the following:

Communication of information, ideas, arguments, concepts, theories and development of an argument in a clearly and effectively organised essay or report.

Use of IT and computer skills in the identification of source material, capture and manipulation of data and support of research.

Planning and undertaking tasks, developing criteria to evaluate performance and seeking and making use of feedback.

# STUDENT AND ACADEMIC SERVICES

Outline Syllabus: Financial Risk Management:	
Basic risk types and key measurement tools	
Creating value with financial risk	
Credit Risk Management:	
Introduction to Credit Risk Management	
Credit Risk Assessment Framework	
Approaches to Credit Risk Management:	
Empirical modelling (incl. market-based models)	
Structural modelling	
Reduced-form modelling	
The main credit risk equation $EL = PD \times LGD \times EAD$ :	
Expected and Unexpected Losses (EL and UL)	
Modelling of Probability of Default (PD)	
Modelling of Loss Given Default (LGD)	
Modelling of Exposure at Default (EAD)	
Credit ratings / credit scoring:	
A taxonomy of credit ratings (external, internal, market-based, sovereign)	
Accounting, financial, market-based and cash flow ratio analysis; analytic relationship mod	dels
Credit risk scorecards	
Credit risk portfolio management:	
Modern Portfolio Theory (MPT) revisited	
Portfolio Effects in Credit Risk: Risk Contributions and	
Unexpected Losses	
Value-At-Risk (VaR) and Credit VaR:	
Introduction to VaR	
VaR modelling approaches (correlation, historical simulation and Monte Carlo simulation)	
Credit VaR models, backtesting and stress testing	
Financial Derivatives:	
Introduction to financial derivatives	
The binomial tree approach	
The Black-Scholes-Merton model	

### STUDENT AND ACADEMIC SERVICES

Introduction to the "Greeks"

Credit derivatives:

A taxonomy of credit derivatives (CDOs, CDSs, CLNs, etc)

The Structuring Process and Securitisation

The Regulatory View of Credit Risk:

Capital and regulation

From Basel I to Basel III

Regulatory aspects of securitisation

**Teaching and Learning Methods:** Module delivery will be based on 3 hours of scheduled learning and teaching activities per teaching week.

Formal contact between lecturers and students will be through lectures and workshops each week.

The main purpose of the lectures will be to convey core material and engage students in critical thinking over the theories and practices relating to credit risk and its management.

The workshops, tutorials and other organised learning activities will aim to enable students to apply the knowledge gained in the lectures and also emulate industry models and practices in a facilitated environment. Specific emphasis will be placed on the use of modern technologies for the purposes of credit risk analysis and management.

Online discussion boards, reference to professional associations (e.g. GARP), use of professional websites (e.g. www.defaultrisk.com) will allow students to keep up to-date with the developments in the area of credit risk and also reflect upon and elaborate on issues that will be covered in the module. The module team will rely extensively on current financial and credit related news to form the backdrop against which the discussion will take place and theories will be sought to be put into practice.

Furthermore, students will be actively directed towards the University Library online Study Skills resources, namely mySkills for the development of academic as well as generic skills appropriate to the level and style of the module.

Students will be directed on how the resources on this site should be used to develop the skills that will underpin their studies in the module handbook and/or via Blackboard.

Lectures: 1 hour per week, total 12 hours

Workshops: 2 hours per week, total 24 hours

Independent Study: 114 hours

Total hours: 150 hours

This breakdown of delivery is only indicative. The module team reserves the right to amend the balance of lectures and workshops as it sees fit for the achievement of the learning outcomes of the module.

Independent Study includes, but is not necessarily restricted to, engaging in essential reading, workshop preparation, contribution to online discussion, development of academic and generic skills, assignment preparation and completion, research required for the purposes of the module, keeping up-to-date with credit risk developments and examination preparation.

### Part 3: Assessment

The module will be assessed by means of a portfolio (40%) and a written individual coursework assessment (60%).

Non-assessed formative feedback will be provided in class group work and individual practical problems that students will be expected to attempt most weeks.

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B	$\checkmark$	60 %	Individual Business Report (2,000 words)
Portfolio - Component A		40 %	Selection of online tasks to be completed during the teaching period
Resit Components	Final Assessment	Element weighting	Description
Report - Component B	$\checkmark$	60 %	Individual Business Report (2,000 words)
Portfolio - Component A		40 %	

	Part 4: Teaching and Learning Methods		
Learning Outcomes	On successful completion of this module students will achieve the follo	owing learning	outcomes:
	Module Learning Outcomes		Reference
	Recognise and explain the importance of financial risk management of credit management in a risk management and regulatory framewo	and the role	MO1
	Critically discuss the different approaches to credit risk modelling and associated theoretical and operational issues with each	d the	MO2
	Demonstrate a good understanding of the main concepts in credit ris probability of default, loss given default and exposure at default and apply a variety of models for their accurate measurement	k that are be able to	MO3
	Carry out a comprehensive financial ratio and cash flow analysis of a to try and quantify credit risk	any company	MO4
	Research, explain and apply various credit risk assessment technique number of different industries (corporate, consumer, sovereign)	ies in a	MO5
	Demonstrate an understanding of the application of portfolio theory in context and appreciate the practices developed to overcome the ass problems	n a credit risk sociated	MO6
	Identify, understand, discuss, critically assess and employ credit deri mitigate credit risk	vatives to	MO7
	Familiarise themselves with the regulatory framework governing cred financial institution's perspective and demonstrate a solid grasp and apply different approaches used by regulators	lit risk from a ability to	MO8
	Critically appraise the role of volatility and correlation in credit risk an ability to empirically apply methods, such as Value At Risk (VaR) to s report and manage credit risk	d exhibit the successfully	MO9
Contact Hours	Independent Study Hours:		
	Independent study/self-guided study	11	.4

# STUDENT AND ACADEMIC SERVICES

	Total Independent Study Hours:	114
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	36
	Total Scheduled Learning and Teaching Hours:	36
		450
	Hours to be allocated	150
	Allocated Hours	150
Reading List	The reading list for this module can be accessed via the following link:	
	https://uwe.rl.talis.com/modules/umad5w-15-3.html	

Part 5: Contributes Towards
I his module contributes towards the following programmes of study:
Business Management with Accounting and Finance [Sep][FT][Frenchay][3yrs] BA (Hons) 2018-19
Accounting and Finance {Dual} [Aug][FT][Taylors][3yrs] BA (Hons) 2018-19
Accounting and Finance {Dual} [Mar][FT][Taylors][3yrs] BA (Hons) 2018-19
Accounting and Finance [Sep][FT][Frenchay][3yrs] BA (Hons) 2018-19
Banking and Finance {Dual} [Aug][FT][Taylors][3yrs] BA (Hons) 2018-19
Banking and Finance {Dual} [Mar][FT][Taylors][3yrs] BA (Hons) 2018-19
Banking and Finance [Sep][FT][NEU][3yrs] BA (Hons) 2018-19
Banking and Finance [Sep][FT][Frenchay][3yrs] BA (Hons) 2018-19
Accounting and Finance [Jan][FT][Northshore][3yrs]-Not Running BSc (Hons) 2017-18