JINDAL GLOBAL BUSINESS SCHOOL
INDIA'S FIRST MULTI-DISCIPLINARY GLOBAL BUSINESS SCHOOL

O.P. Jindal Global University
A Private University Promoting Public Service
NAAC Accreditation - 'A' Grade

Jindal Global Business School
Course Outline

Course Title	Financial Risk Management
Core or Elective	Elective
Program and Batch	MBA-2025, IBM-2022, IBM-2023
Semester & Academic Year	Fall 2026
Credits	1.5
Discipline/Area	Finance & Accounting
Name of the Faculty Member/Course Instructor	Prof. Swati Sharma
Contact Details of the Faculty Member	swati@jgu.edu.in
Contact Details of Support Staff	jgbs-eo@jgu.edu.in
Faculty Member's Open Office Day/s & Time	Monday 10:00 AM- 11:00 AM Wednesday 10:00 AM- 11:00 AM

Introduction to the Course

The objective of this course is to provide students with a comprehensive understanding of the diverse types of financial risks that firms encounter in today's dynamic business environment. It emphasizes the process of identifying, analyzing, and measuring such risks, while also equipping learners with the knowledge of effective tools and techniques to manage them. The course places particular focus on reliable approaches to financial risk measurement, offering both theoretical insights and practical frameworks that are widely applied in industry.

A key feature of the course is the integration of hands-on learning through the development of **Excel-based & R models.** These models are designed to measure and evaluate risks across different asset classes, allowing students to gain practical exposure to risk analysis and decision-making tools. By building these models, learners will bridge the gap between theoretical knowledge and practical application, preparing them for real-world challenges in risk management.

The course assumes that participants already possess a foundational understanding of financial management concepts, as well as familiarity with derivative instruments such as forwards, futures, and options. With this background, students will be able to delve deeper into advanced risk management strategies, ultimately enhancing their ability to evaluate and mitigate financial risks effectively.

Course Learning Objectives

At the end of the course, students should be able to

1. CLO1- Develop conceptual understanding of complete Risk Management process, develop understanding of variety of Financial Risks faced by a firm, its measurement & techniques to effectively mitigate it

2. CLO2- learn Var Techniques; Parametric, Simulation- Historical & Monte Carlo, Var and Regulatory Capital
3. CLO3- understand business problems from financial risk perspective and, develop and evaluate alternatives to issue those business problems

Program Competency Goals – MBA

MBA Programme Competency Goals (PCGs)		**MBA Programme Learning Objectives (PLOs)**
		Students will be able to
1	**Technological Agility:** Ability to adopt relevant technologies for better business decision making.	1. Understand relevant business technologies
		2. Understand future technologies in business domain
2	**Responsible Global Citizenship:** Ability to understand the interplay between local and global issues and to act with sensitivity towards ethical and social issues	3. Understand the interplay between local and global business issues
		4. Demonstrate sensitivity towards ethical issues
		5. Demonstrate sensitivity towards social issues
		6. Address societal issues
3	**Effective communication:** Ability to effectively exchange ideas and information	7. Present their ideas with clarity
		8. Prepare an organized and logical business document
		9. Use technology for effective communication
4	**Critical Thinking:** Ability to identify, analyze business problems and propose effective solutions	10. Identify main issues of business problems
		11. Examine information from different sources
		12. Draw inferences from analysis
		13. Evaluate alternatives
		14. Summarize and conclude
5	**Leadership:** Ability to take initiative, inspire and	15. Take initiative

	collaborate with others	16. Contribute effectively in groups

PLO-PCG Assessments Mapping Matrix

Program Learning Objectives (PLOs)	Program Competency Goals (PCGs)	Course Assessment Item
This course helps you to develop the following Program Learning Outcomes:	This course helps you to develop the following Program Competency Goals:	This learning outcome will be assessed in the following items
PLO12, PLO13, PLO14	PCG4	A1, A2, A3, A4

Evaluation Schema

The course grade will be determined based on:

Assessment Task		Weightage	Nature (Individual/Group	Week of Assessment	PLOs to be Assessed
A1	**Quizzes**	30%	Individual	Week 3 & Week 5	**PLO 12-14**
A2	**Class participation**	10%	Individual	Continuous assessment	**PLO 12-14**
A3	**Mid term**	20%	Individual	Week 4	**PLO 12-14**
A4	**Assignment**	10%	Individual	Week 5	**PLO 12-14**
A5	**Project (continuous assessment**	30%	Individual	Week 7	**PLO 12-14**

Evaluation Item	Explanation
A1-Quiz	Two in-class quiz of 15 marks will be conducted in week 3 & week 5.
A2- Class participation	Class participation is a continuous assessment which used evaluation criteria like students' conduct in classroom, Q&A/participation during sessions, time-management, practicing in-class activities etc.
A3- Mid term	The MID term examination will be of 20 marks of 1.5 hours duration in 7th/8th session (Week 4).
A4-Assignment	Topic: Portfolio optimization; Release date: Start of 5th week; Deadline: Within 7 days of release. Detail instruction will be shared once class starts.
A5-Project (Continuous Assessment)	The end term examination will be conducted in "continuous assessment" mode and a project on the topic of "Value at Risk" will be given. Start: 6th Week - Deadline: 7th Week.

Rubrics for Assessments

Rubric for Project Assessment (A4 & A5)

	Poor (0-4)	**Average (4-8)**	**Above average (8-12)**	**Distinction (12-15)**
Research Quality & and variety of tools used for analysis **(15 Marks)**	Minimal analysis with insufficient number of tools and techniques used for analysis.	Acceptable analysis with minimum number of tools and techniques used for analysis	Sufficient analysis with adequate number of tools and techniques used for analysis	Analysis with meaningful insights and more than relevant number of tools and techniques used for analysis.
Quality/Robustness of analysis Quality of analysis with respect to problem formulation, clear representation, graphical representation, alternative methods **(15 Marks)**	Insufficient quality without a robust analysis	Acceptable quality and robustness of analysis	Good quality and robustness of analysis	Excellent quality and robustness of analysis.

Teaching Method

The course will employ a blend of instructional methods, including interactive lectures, case analyses, problem-solving exercises, and the use of Excel for spreadsheet-based modelling and R for coding based calculation. These approaches are designed to strengthen students' conceptual understanding, enhance analytical thinking, and foster practical application of financial risk management tools. Emphasis will be placed not only on developing theoretical foundations but also on applying them effectively to real-world scenarios. Case studies and practice exercises will be shared periodically to reinforce learning.

For motivated and committed students, this course aims to provide an intellectually stimulating journey—one that is both challenging and rewarding. The learning experience is intended to be engaging and insightful, with the ultimate objective of equipping participants with a strong and meaningful grasp of financial risk management. While advanced techniques will be explored, equal importance will be given to refining fundamental concepts, ensuring a well-rounded and practical understanding of the subject.

Text Book / Course Package / Other Readings

Hull, J. C , "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014

Reference Books

1. Chance, D M (2013) , "*An Introduction to Derivatives and Risk Management*" (9th ed)
2. John C. Hull, *"Fundamentals of Futures & Options Market"* ,(8th ed),Pearson USA, Thomson, South Western
3. Stulz M Rene, *Risk Management & Derivatives*, 3rd edition, Cenage Learning, Indian Edition.
4. Dun & Bradstreet , *Financial Risk Management*, Tata McGraw-Hill publishing company
5. Ciby Joseph (2013), *Advance Credit Risk Analysis and Management,* Wiley Finance
6. Sundram Janakiramanan(2011), "Derivative & Risk Management", Pearson

Relevant cases and specific references including recent articles will be announced during the class.

Online Resources

1. www.dbie,rbi.org.in – RBI's Database for Indian Economy
2. www.mospi.nic.in – CSO website
3. www.finmin.nic.in – Ministry of Finance
4. www.sebi.gov.in – SEBI website
5. www.nse-india.com – NSE website

Session Plan

Session Details	**Topics**	**PLOs Covered**
Session 1-2	Introduction to Financial Risk Management	**PLO 12-14**
Objective of the session	To understand what Risk & Risk Management Process is.	
Subtopics to be covered	Business and non-Business risk Types of Financial Risk Risk identification and assessment,	
Readings	Chapter 1, "Risk Management and Financial Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture, Class Discussion & Problem Solving	
Session 3-4	Risk Assessment Tool	**PLO 12-14**
Objective of the session	Value at Risk (VaR)-I	
Subtopics to be covered	Steps in constructing VaR VaR and its two parameters	
Readings	Chapter 1&9, "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture , Class Discussion & Problem Solving	
Session 5	Risk Assessment Tool	**PLO 12-14**
Objective of the session	VaR -II: Defining VaR from pdf of gain & loss	
Subtopics to be covered	Standard Normal distribution, Confidence Interval, Quantiles Uniform Distribution & VaR Time Horizon	
Readings	Chapter 1&9, "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture , Class Discussion & Problem Solving	
Session 6-7	Risk Assessment Tool	**PLO 12-14**
Objective of the session	VaR-III	

Subtopics to be covered	Usage of excel functions: Normsinv, Normdist Expected Shortfall, Shortcomings of VaR Three Methods of Calculating VaR, Impact of Autocorrelation on VaR	
Readings	Chapter 1&9, "Risk Management and Financial Institutions", 3rd	
Case Title & Number	NA	
Pedagogy	Lecture, Class Discussion & Problem Solving	
Session 8-9	Risk Management	**PLO 12-14**
Objective of the session	Parametric VaR - Assumptions & Normality Model	
Subtopics to be covered	General Normal Model for VaR Quantile (for the Normal Distribution) by Excel & its usage in VaR calculation VaR as value of NORMINV	
Readings	Chapter 15, "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture , Class Discussion & Problem Solving	
Session 10	**Guest Lecture by FRM Shivam**	
Objective of the session	Portfolio Risk Analytical Method	
Subtopics to be covered		
Readings		
Case Title & Number		
Pedagogy		
Session 11-12	Risk Management-Portfolio	**PLO 12-14**
Objective of the session	Portfolio Risk Analytical Method	
Subtopics to be covered	Conceptual frame work VaR of Portfolio of assets • Effect of Diversification Portfolio risk-Analytical Method • Portfolio VaR-Generalization Diversified VaR, Undiversified VaR & Individual VaR	
Readings	Chapter 15, "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture, Class Discussion & Problem Solving	
Session 13	Risk Management-Portfolio	**PLO 12-14**
Objective of the session	• Relationship between portfolio risk with (ρ,N)	
Subtopics to be covered	Log Normal Distribution & VaR Comparing VaR across different Confidence levels & days	

	What is Autocorrelation	
Readings	Chapter 15, "Risk Management and Financial Institutions", 3rd Edition, Wiley Indian edition, 2014 by Hull, J. C	
Case Title & Number	NA	
Pedagogy	Lecture, Class Discussion & Problem Solving	
Session 14	Reading & Revision Week/ Examination Week*	**PLO 12-14**
Objective of the session	NA	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	
Session 15		**PLO 12-14**
Objective of the session	Reading & Revision Week/ Examination Week*	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	

*Elective Endterm Examinations may take place in the last week of classes.

Disability Support

JGU endeavours to make all its courses accessible to students. The Disability Support Committee (DSC) has identified conditions that could hinder a student's overall wellbeing. These include physical and mobility-related difficulties, visual impairment, hearing impairment, mental health conditions, and intellectual/learning difficulties, e.g., dyslexia and dyscalculia. Students with any known disability needing academic and other support are required to register with the Disability Support Committee (DSC) by following the procedure specified at **https://jgu.edu.in/disability-support-committee/**

Students who need support may register any time during the semester up until a month before the end semester exam begins. Those students who wish to continue receiving support from the previous semester, must re-register within the first month of a semester. Last-minute registrations and support might not be possible as sufficient time is required to make the arrangements for support.

The DSC maintains strict confidentiality about the identity of the student and the nature of their disability and the same is requested from faculty members and staff as well. The DSC takes a strong stance against in-class and out-of-class references made about a student's disability without their consent and disrespectful comments referring to a student's disability.

All general queries are to be addressed to **disabilitysupportcommittee@jgu.edu.in**

Disclaimer: This course outline including assessments, mode, nature and weightage of assessments, sessions, sequence of sessions and/or readings may be revised during the semester if such need arises.