



**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 Modelling using Excel
Core or Elective	Elective
Program and Batch	BBA-2024, BBA-BA-2024, BBA-FB-2024, BBA-FM-2024
Semester & Academic Year	Fall 2026
Credits	3
Discipline/Area	Accounting and Finance
Name of the Faculty Member/Course Instructor	Prof. Mehak Nanda
Contact Details of the Faculty Member	mehak.nanda@jgu.edu.in
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Faculty Member's Open Office Day/s & Time	2-3 p.m. on Monday 3-4 p.m. on Thursday

Introduction to the Course

The course is intended to provide the students with a thorough understanding on how to develop the financial modelling skills for the application of financial theory to the practical problems such as financial statement analysis, portfolio management, and capital budgeting. The course uses spreadsheets as basic tool to analyse financial decisions related to financial statement analysis, cost of capital determination, capital budgeting, and portfolio management. The course is expected to broaden the intellectual horizon of the scholars in gaining a practical approach towards understanding and visualizing the financial affairs of a corporate entity.

Course Learning Objectives

At the end of the course, students should be able

1. CLO1- to create excel-based models to prepare, analyse, and use financial statements to evaluate company's performance.
2. CLO2- to calculate financial and operating leverages, determine the cost of capital, evaluate fixed income securities, optimize portfolio, evaluate company & investments.
3. CLO3- to evaluate financial projects using different project evaluation techniques.

4. CLO4- to learn how to use a variety of spreadsheet tools and techniques for financial modelling such as financial and statistical functions, what-if scenarios, one- and two-way input tables, scenario and sensitivity analysis, and decision trees.

Programme Competency Goals

BBA Programme Competency Goals (PCGs)		BBA Programme Learning Objectives (PLOs)	
		Students will be able to	
1	Responsible Global Citizenship: Ability to understand the interplay between local and global issues and to act with sensitivity towards ethical and social issues	1. Understand local business issues	
		2. Understand global business issues	
		3. Demonstrate sensitivity towards ethical issues	
		4. Demonstrate sensitivity towards social issues	
2	Effective communication: Ability to effectively exchange ideas and information	5. Present their ideas with clarity	
		6. Write in a coherent manner	
		7. Use technology for communication	
3	Critical Thinking: Ability to identify, analyze business problems and propose effective solutions	8. Identify main issues of business problems	
		9. Examine information from different sources	
		10. Draw inferences from analysis	
4	Teamwork: Ability to work and contribute effectively in group -settings	11. Understand the factors to work effectively in groups	
		12. 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
PLO 1-2	PCG 1	A1, A2, A3, A4, A5
PLO 8-10	PCG 3	A1, A2, A3, A4, A5

Evaluation Schema

The course grade will be determined based on:

Assessment Task	Weightage (Percentage)	Nature (Individual/Group)	Week of Assessment	PLOs to be Assessed
A1 Class Participation	10%	Individual	Throughout the course	PLO 1-2, PLO 8-10
A2 Quizzes	20%	Individual	Week 6 & Week 10	PLO 1-2, PLO 8-10
A3 Midterm	20%	Individual	In the Midterm Week	PLO 1-2, PLO 8-10
A4 Assignment	20%	Individual	Week 11	PLO 1-2, PLO 8-10
A5 Endterm Examination	30%	Individual	In the JGU Examination period/week	PLO 1-2, PLO 8-10

Description of Assessments:

A1 Class Participation- Class participation is a continuous assessment that uses evaluation criteria such as students' conduct in the classroom, participation in Q&A sessions, time management and completion of in-class activities.

A2 Quizzes- Two in-class quizzes of 10 marks each will be conducted on UMS.

A3 Midterm-The midterm examination will be of 20 marks with a maximum duration of 90 minutes. This will be a pen and paper invigilated exam held on the JGU campus.

A4 Assignment- In-class assignment of 20 marks based on topics covered in class. Duration: 60-90 minutes.

A5 End term examination- The end term examination will be of **30 marks of 1.5 hours duration**. This will be an invigilated exam according to the mode, modalities and process as decided by CoE.

Rubrics for Assessments

	Poor (0)	Average (1-2)	Above average (3-4)	Distinction (5)
Research Quality & and variety of tools used for analysis (5 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 (5	Insufficient quality without a robust analysis	Acceptable quality and robustness of analysis	Good quality and robustness of analysis	Excellent quality and robustness of analysis.

Marks)				
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Teaching Method

The pedagogic method employed in this course will be a combination of lectures, class discussions and practicing problem set. The course will follow a mix of instruction-oriented sessions and learning through participations. Students need to bring laptop for practicing problems set in each session.

Textbook

- Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day
- Financial Modeling by Simon Benninga
- Financial modeling with excel by Francis J. Clauss

Session Plan

Session Details	Topics	PLOs Covered
Session 1	Financial Modelling: Three Statements model	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to</i> <ul style="list-style-type: none"> • familiarize with process of preparing three statement model • be able to prepare 3-statement model using Excel 	
Subtopics to be covered	Income-statement, Balance sheet and Cash flow statement	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 6 & 7	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 2	Financial Modelling: Three Statements model	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to</i> <ul style="list-style-type: none"> • familiarize with process of preparing three statement model • be able to prepare 3-statement model using Excel 	
Subtopics to be covered	Income-statement, Balance sheet and Cash flow statement	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 6 & 7	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 3	Analysing Financial Statement	PLO 1-2, PLO 8-

Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How financial statements can be analyzed by using excel • Interpretation of ratios • Break-Even Analysis • Use of leverage 	10
Subtopics to be covered	Horizontal Analysis, Vertical Analysis, DuPont Model, Ratios, Break-even analysis, Leverage	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 6, 7 & 11	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 4	Analysing Financial Statement	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How financial statements can be analyzed by using excel • Interpretation of ratios • Break-Even Analysis • Use of leverage 	
Subtopics to be covered	Horizontal Analysis, Vertical Analysis, DuPont Model, Ratios, Break-even analysis, Leverage	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 6, 7 & 11	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 5	Financial Forecasting	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to:</i> <ul style="list-style-type: none"> • Understand the role of forecasting • Use of forecasting techniques using excel in finance. • Forecasting of three statement model 	
Subtopics to be covered	Forecasting techniques such as Linear Regression, Trend Lines, Data smoothing, etc.	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 8	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	

Session 6	Financial Forecasting	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to:</i> <ul style="list-style-type: none"> • Understand the role of forecasting • Use of forecasting techniques using excel in finance. • Forecasting of three statement model 	
Subtopics to be covered	Forecasting techniques such as Linear Regression, Trend Lines, Data smoothing, etc.	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 8	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 7	Fraud Case	PLO 1-2, PLO 8-10
Objective of the session	To familiarize students how financial modelling may be used for misrepresenting the data	
Subtopics to be covered	Fraud Cases discussion	
Readings	NA	
Case Title & Number	NA	
Pedagogy	In-class activities	
Session 8	Guest Lecture 1	PLO 1-2, PLO 8-10
Objective of the session	Forecasting Financial Statements	
Subtopics to be covered	To understand how to forecast financial statements using Excel	
Readings	NA	
Case Title & Number	NA	
Pedagogy	Lecture and Class discussion	
Session 9	Cost of Capital	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How to use spreadsheet to determine cost of capital. • Optimization of WACC 	
Subtopics to be covered	CAPM, Growth Model, WACC	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 13	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 10	Cost of Capital	PLO 1-2, PLO 8-

		10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How to use spreadsheet to determine cost of capital. • Optimization of WACC 	
Subtopics to be covered	CAPM, Growth Model, WACC	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 13	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 11		
	Fixed Income Securities: Bonds	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How to determine price of fixed income securities • Use of excel for determining pricing, yield, duration and modified duration 	10
Subtopics to be covered	Pricing, Yield measures, Duration, Modified duration, Convexity	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 14	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 12		
	Fixed Income Securities: Bonds	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> • How to determine price of fixed income securities • Use of excel for determining pricing, yield, duration and modified duration 	10
Subtopics to be covered	Pricing, Yield measures, Duration, Modified duration, Convexity	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 14	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 13		
	Portfolio Analysis	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i>	10

	<ul style="list-style-type: none"> • Trade-off between risk & return • Use of excel in optimizing portfolio 	
Subtopics to be covered	Mean-Variance Analysis, Portfolio optimization	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 12	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 14	Portfolio Analysis	PLO 1-2, PLO 8-10
Objective of the session	<p>After the successful completion of this session, students should be able to understand:</p> <ul style="list-style-type: none"> • Trade-off between risk & return • Use of excel in optimizing portfolio 	10
Subtopics to be covered	Mean-Variance Analysis, Portfolio optimization	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 12	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 15	Investment Analysis	PLO 1-2, PLO 8-10
Objective of the session	<p><i>After the successful completion of this session, students should be able to understand:</i></p> <ul style="list-style-type: none"> • How to evaluate projects using different project evaluation techniques 	10
Subtopics to be covered	NPR, IRR, Payback period, Discounted Payback period, Profitability index	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 15	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 16	Investment Analysis	PLO 1-2, PLO 8-10
Objective of the session	<p><i>After the successful completion of this session, students should be able to understand:</i></p> <ul style="list-style-type: none"> • Analyse how organisations make investment decisions when they have limited capital 	10
Subtopics to be covered	Capital Rationing	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L.	

	Day: Chapter 15	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 17	Sensitivity and Scenario Analyses	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> How to use sensitivity analysis and scenario analysis to take decisions 	10
Subtopics to be covered	Sensitivity and Scenario Analyses	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 15	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 18	Leveraged Buyouts	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> How company uses leverage for different buyouts 	10
Subtopics to be covered	Management Buy-ins, Management buy-outs, Secondary buyouts	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 19	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 19	Decision making using Excel	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> How to use Decision tree for taking decision for business How probabilistic models can be used in excel for decision making. 	10
Subtopics to be covered	Probability concepts, Decision Tree Model, Linear Programming	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 20 and 21	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	

Session 20	Decision making using Excel	PLO 1-2, PLO 8-10
Objective of the session	<p><i>After the successful completion of this session, students should be able to understand:</i></p> <ul style="list-style-type: none"> • How to use Decision tree for taking decision for business • How probabilistic models can be used in excel for decision making. 	
Subtopics to be covered	Probability concepts, Decision Tree Model, Linear Programming	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 20 and 21	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 21	Risk Management: Value at Risk	PLO 1-2, PLO 8-10
Objective of the session	<p><i>After the successful completion of this session, students should be able to understand:</i></p> <ul style="list-style-type: none"> • The concept of value at Risk • How VaR is used for risk management • How to calculate VaR 	
Subtopics to be covered	VaR, Methods of VaR, Historical Simulation, etc.	
Readings	Hull, J.C, "Risk Management and Financial Institutions", 4th Edition, Chapter 12 & 13	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 22	Risk Management: Value at Risk	PLO 1-2, PLO 8-10
Objective of the session	<p><i>After the successful completion of this session, students should be able to understand:</i></p> <ul style="list-style-type: none"> • The concept of value at Risk • How VaR is used for risk management <p>How to calculate VaR</p>	
Subtopics to be covered	VaR, Methods of VaR, Historical Simulation, etc.	
Readings	Hull, J.C, "Risk Management and Financial Institutions", 4th Edition, Chapter 12 & 13	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 23	Simulation Activities	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should</i>	

	<i>be able to understand:</i> <ul style="list-style-type: none"> The assets & liabilities valuation of company How to leverage betas 	
Subtopics to be covered	Assets, Adjusted assets, Gordon's Growth Model, Market based model	
Readings	Mastering Financial Modelling in Microsoft Excel: A practitioner's guide to applied corporate finance by Alastair L. Day: Chapter 19	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 24	AI in Excel	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> AI-driven formula creation, data analysis, and visualization	
Subtopics to be covered	AI-driven formula creation, data filtering, data analysis, and visualization	
Readings	To be given before the lecture	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 25	AI in Excel	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> <ul style="list-style-type: none"> AI-driven formula creation, data analysis, and visualization 	
Subtopics to be covered	AI-driven formula creation, data filtering, data analysis, and visualization	
Readings	To be given before the lecture	
Case Title & Number	NA	
Pedagogy	Problem solving & class discussion	
Session 26	Guest Lecture 2	PLO 1-2, PLO 8-10
Objective of the session	AI for Financial Modelling and Decision-Making	
Subtopics to be covered	To understand AI applications in financial modelling.	
Readings	NA	
Case Title & Number	NA	
Pedagogy	Lecture and Class discussion	
Session 27	Common Pitfalls and Advanced Tips	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i>	

	<ul style="list-style-type: none"> Common errors and checks for frequent mistakes 	
Subtopics to be covered	“Spot the error” interactive Excel exercise	
Readings	NA	
Case Title & Number	NA	
Pedagogy	In-class activities	
Session 28	Common Pitfalls and Advanced Tips	PLO 1-2, PLO 8-10
Objective of the session	<i>After the successful completion of this session, students should be able to understand:</i> Common errors and checks for frequent mistakes	
Subtopics to be covered	“Spot the error” interactive Excel exercise	
Readings	NA	
Case Title & Number	NA	
Pedagogy	In-class activities	
Session 29	Reading & Revision Week/ Examination Week*	PLO 1-2, PLO 8-10
Objective of the session	NA	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	
Session 30	Reading & Revision Week/ Examination Week*	PLO 1-2, PLO 8-10
Objective of the session	NA	
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.