



National Taiwan University of Science and Technology

2021 Winter Program

FIN 375 Financial Modeling

Course Outline

Course Code: FIN 375

Instructor: Dr. Michael J. Petersen

Home Institution: North Dakota State University

Office Hours: By appointment

Email: Michael.j.petersen@ndsu.edu

Credit: 4

I. Course Description

The objective of Financial Modeling is to present you with the basic theory and practice of financial management and investments using Excel as a tool to build financial models that can aid in decision-making.

This course will (1) reinforce and strengthen your understanding of the basic concepts in financial modeling and investing, including time value of money, capital budgeting, asset pricing, cost of capital, cash flow modeling, and portfolio construction, and (2) teach you how to use Excel to organize information and perform useful calculations quickly while minimizing mistakes.

A. After successfully completing Financial Modeling you should be able to:

1. Use Excel efficiently in a variety of settings.
2. Estimate future cash flows and calculate various capital budgeting measures.
3. Understand how to use conditional and lookup functions appropriately.
4. Price various assets, and calculate an appropriate cost of capital.
5. Use Solver to maximize an objective function with a set of constraints..

Required Textbooks and Software:

Financial Analysis with Microsoft Excel 2019, 9th Edition, Timothy R. Mayes, 978-0-357-44205-0

Microsoft Office: You will need a full desktop version of Excel to complete the class.



Grading & Evaluation:

A+:4.3——95-100

A :4.0——87-94

A -:3.7——82-86

B+:3.3——78-81

B :3.0——75-77

B -:2.7——71-74

C+:2.3——68-70

C :2.0——65-67

C -:1.7——61-64

D :1.0——55-60

E :0.0——49-54

X :0.0——0

Course Assignments:

Homework: There will be 8 homework assignments due, covering basic exercises from the material.

Quizzes: There will be 2 quizzes to cover key terms and concepts from the chapters.

Projects: There will be 4 projects, creating Excel files using material from multiple chapters.

Exams: There will be 2 exams for the course. They will be a mix of multiple choice questions and essays.

Course Grades:

Homework (8 @ 10 pts each)	80 pts
Quizzes (2 @ 50 pts each)	100 pts
Projects (4 @ 30 pts each)	120 pts
Exams (2 @ 100 pts each)	<u>200 pts</u>
Total	500 pts



Course Schedule:

Day	Chapter and Topic	Assignment
Week 1 Day 1	Ch 1 Introduction to Excel	
Week 1 Day 2	Ch 2 Basic Financial Statements	HW #1 Due
Week 1 Day 3	Ch 3 Financial Statement Analysis Tools	
Week 1 Day 4	Ch 4 The Cash Budget	HW #2 Due
Week 1 Day 5	Quiz #1 Project Workday	Project #1 Due
Week 2 Day 1	Ch 5 Financial Statement Forecasting	
Week 2 Day 2	Ch 6 Forecasting Sales With Time Series Methods	HW #3 Due
Week 2 Day 3	Ch 7 Break-even and Leverage Analysis	
Week 2 Day 4	Ch 8 The Time Value of Money	HW #4 Due
Week 2 Day 5	Midterm Exam Project Workday	Project #2 Due
Week 3 Day 1	Ch 9 Common Stock Valuation	
Week 3 Day 2	Ch 10 Bond Valuation	HW #5 Due
Week 3 Day 3	Ch 11 The Cost of Capital	
Week 3 Day 4	Ch 12 Capital Budgeting	HW #6 Due
Week 3 Day 5	Quiz #2 Project Workday	Project #3 Due
Week 4 Day 1	Ch 13 Risk and Capital Budgeting	
Week 4 Day 2	Ch 14 Portfolio Statistics and Diversification	HW #7 Due
Week 4 Day 3	Ch 15 Writing User-Defined Functions With VBA	
Week 4 Day 4	Ch 16 Analyzing Datasets With Tables and Pivot Tables	HW #8 Due
Week 4 Day 5	Final Exam Project Workday	Project #4 Due

All assignments are due by midnight on the day assigned.