




Managerial Finance

FNCE311-3

CRN: 57350, Spring 2023 (January 24, 2023 – May 18, 2023)

Instructor:	Paul Yan
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Lecture Hours/Location:	MWF:10:30pm-11:20am @ South Hall Room: 340
Office Hours/Location:	W: 3:00pm-4:00pm via Zoom or in my office
Prerequisites:	None
Textbook:	Corporate Finance (5 th edition, 2022) by Ivo Welch ISBN-978-0-9840049-2-8 (All chapters could be downloaded for free)
Websites:	https://book.ivo-welch.info/home/ (Prof. Welch's website for the textbook, chapters, slides) http://datayyy.com/cfe/ (Website) http://datayyy.com/excel/ (learning Excel)
QR codes	
Course Description	The objectives of the course are twofold. First, to teach students the mathematics of time value of money, and the principles of risk and return and stock and bond valuation. Second, to make students familiar with the institutional environment of finance which includes financial markets and instruments, and financial institutions. Topics include the time value of money, risk and return, valuation of securities, the functions, organization, structure and regulation of financial institutions and markets. Overview of the globalization process, ethical, political and social, and demographic issues that apply to financial markets and institutions.
Computational Tool	Excel
Teaching method	Semi flipped classroom: go through lecture notes (slides) quickly, ask tons of questions, a few Excel functions, a few in-class exercises
R Software	R is open-source computational software. Students are not required to have any knowledge related to R and I will not teach R.
One-line R code for this course	<code>source("http://datayyy.com/cf.txt")</code> # I will explain the above line during our first lecture
School of Business Mission	Students acquire strong quantitative, analytical, and communication skills while preparing for professional success as socially responsible individuals in today's

	complex business environment. We strive for teaching excellence and recognize that high-quality faculty scholarship and professional activities advance the impact we have on practice, pedagogy, and our knowledge of business.								
Attendance Policy	Attending classes regularly is required. Before-class preparation and in-class participation is an integral part of this course. Students are strongly encouraged to participate in class discussions and ask questions. Students are encouraged to discuss current events relevant to this course or their own experiences. Homework problems are regularly assigned.								
Course Level Learning Goals	<ul style="list-style-type: none"> • Apply quantitative finance models to time value of money problems and stock and bond valuation. • Use critical thinking skills to analyze/solve financial problems. • Learn the role of ethics in financial decision making. • Understand the impact of info technology on financial markets. • Apply statistical tools to measure and interpret risk and return. 								
Academic Integrity:	https://www.geneseo.edu/dean_office/dishonesty								
Attendance Policy	If you are feeling unwell physically and/or mentally, please do not attend in-person classes. You will not be penalized for non-attendance. The reason is that in-person courses present the highest risk of contagion and members of the college community who may be impacted if ill students attend these classes.								
Grade Evaluation	<table> <tr> <td>HW & Data cases (about 8)</td> <td>30%</td> </tr> <tr> <td>Midterm</td> <td>30%</td> </tr> <tr> <td>Final exam</td> <td>30%</td> </tr> <tr> <td>Class participation</td> <td>10%</td> </tr> </table>	HW & Data cases (about 8)	30%	Midterm	30%	Final exam	30%	Class participation	10%
HW & Data cases (about 8)	30%								
Midterm	30%								
Final exam	30%								
Class participation	10%								
Laptop policy	Students are encouraged to bring a laptop to the class. However, it should be used for class related activities only.								
Course Schedule	For the detailed schedule, see below. I reserve the right to change the course schedule throughout the semester. Changes to the schedule will be announced in class or via email.								

From a percentage grade to a letter grade

Percentage grade	Letter grade
$grade \geq 90\%$	A
$85\% \leq grade < 90\%$	A-
$80\% \leq grade < 85\%$	B+
$75\% \leq grade < 80\%$	B
$70\% \leq grade < 75\%$	B-
$65\% \leq grade < 70\%$	C+
$60\% \leq grade < 65\%$	C
$55\% \leq grade < 60\%$	C-
$grade < 55\%$	F

Course Schedule: Academic calendar Spring 2022: <https://www.geneseo.edu/registrar/academic-calendar>

Course Schedule:

Week	Date	Topic	Homework and data Case
1	1/25 1/27	Self-introduction, syllabus, my teaching philosophy, a few basic concepts Chapter 1: Introduction	
2	1/30 2/1 2/3	Chapter 2: Time value of money present value of one future value, present value of annuity, future value and NPV	HW and data case #1
3	2/6 2/8 2/10	Chapter 3: Stock and Bond valuation Present value of a perpetuity, present value of annuity, future value of annuity, concept of due	
4	2/13 2/15 2/17	Chapter 4: Capital budgeting NPV calculation and rule, IRR rule, profitability, payback rules	HW and data case #2
5	2/20 2/22 2/24	Chapter 5: Interest rate and yield curve Inflation, nominal rate vs. real rate, Yield-curve, spread	HW and data case #3
6	2/27 3/1 3/3	Chapter 6: Uncertainty default and risk Interest rate vs. credit risk, bonds' rating	HW and data case #4
7	3/6 3/8/ 3/10	Review Mid-term Chapter 7: 1st look at investments Stock, bond, and cash,	

Week	Date	Topic	Data Case
8	3/13 3/15 3/17	Spring Break - No classes	
9	3/20 3/22 3/24	Chapter 7: 1st look at investments Stock, bond, and cash,	HW and data case #5
10	3/27 3/29 3/31	Chapter 8: Investor choice: risk vs. reward How to measure risk and return? Diversification, total risk, market risk and firm specific risk	HW and data case #6
11	4/3 4/5 4/7	Chapter 9: Cost of Capital Risk-free rate, cost of equity (equity premium), cost of debt, tax benefit of debt	HW and data case #7
12	4/10	Chapter 10: CAPM (Capital Asset Pricing Model)	HW and data case #8

	4/12 4/14	Market risk: beta, how to estimate a stock's beta, and adjusted beta	
13	4/17 4/19 4/21	Chapter 11: Market imperfections Chapter 12: Market efficient hypothesis	
14	4/24 4/26 4/28	Chapter 14: Financial statement analysis Several financial statement	
15	5/1 5/3 5/5	Chapter 15: Ratio analysis Current ratio, profitability ratio, Price-earnings ratio, leveret ratio etc.	
16	5/15	Final exam 8:00am-10:30am	

Appendix A: How to download and install R

Step 1: Go to <http://r-project.org>

Step 2: Click "CRAN" on the left

Step 3: Choose a server nearby

Step 4: Choose appropriate type such as Windows, Mac

Step 5: Download "Base"

Two videos:

Windows users: <https://www.youtube.com/watch?v=ZoPJGmpYJzw>

Mac users: <https://www.youtube.com/watch?v=WJDrYUqNrHg>

Appendix B: After launching R, type the following command.

```
source("http://datayyy.com/cf.txt")
```

The following menu will pop up.

```
*-----*
* FNCE311                               Spring 2023 by Yan *
*-----*
* .c1  Introduction                       *
* .c2  Present value                     *
* .c20 R basics (optional)               *
*-----*
* >.c1    # go to chapter 1 (a dot in front of c1) *
* >.uu    # go to the utility menu           *
* >.cf    # back to this menu               *
*-----*
```

Appendix C: After typing `.c1`, (note that there is a dot in front of `c1`), will we see the following instructions.

```
> .c1
function(i) {
" i  Chapter 1: Introduction
  - -----
  0  Survey results
  1  R installation/one line R-code for this course
  2  About the book by Iov Welch
  3  Read on-line or Order a printed copy
  4  Percentage grades to letter grades
  5  Preface download and FAQ
  6  Download chapters (pdf)
  7  Download slides (pdf or pptx)
  8  Assumption #1: A typical investor is rational
  9  Assumption #2: Stock market is efficient
 10  Assumption #3: No Arbitrage opportunities
 11  Assumption #4: The law of one price
 12  Opportunity cost
 13  Bond vs. Stock (debt vs. equity)
 14  Stakeholders for a corporation
 15  Separation of ownership and management (control)
 16  Ethical dilemmas
 17  Corporate responsibility index
 18  Data sets
 19  YouTube
 20  Links

Example #1:>.c1      # see the above list
Example #2:>.c1(1)  # see the first explanation
```

Appendix D: Type .uu (a dot in front of uu), you will see the following menu.

```
> .uu
function() {
"
*-----*
* Utilities      -short-cut --                                *
*-----*
* .calendar      # .cal                                       *
* .macUsers      # .mac                                       *
* .allChapters   # .all                                       *
* .chapters      # .dc      download chapters                *
* .inClassEx     # .ice                                       *
*-----*
* >.ice          # see a list of ice                          *
* >.uu           # back to utilites                          *
* >.cf           # back to main menu                          *
*-----*
";utilities_() }
```

Appendix E: To see all chapters covered, type .all or .all(), shown below (subject to change)

```
> .all
function() {
"
*-----*
* Corporate Finance                                          *
*-----*
* .c1 Introduction                                          *
* .c2 Present value                                         *
* .c3 Stock & Bond valuation: Annuities/perpetuities      *
* .c4 Capital budgeting                                     *
* .c5 Interest rate and yield curve                       *
* .c6 Uncertainty, default and risk                       *
* .c7 A first look at investments                          *
* .c8 Investor choice: Risk and Reward                    *
* .c9 Benchmarked cost of capital                         *
* .c10 Capital Asset Pricing Model                        *
* .c11 Market imperfections                               *
* .c12 Perfect/Efficient Market, Behavioral finance       *
* .c14 Financial Statements/cash flows                    *
* .c15 Ratio Analysis for Financial Statements            *
*-----*
```