



### FINANCE I: FUNDAMENTALS (GM4201)

SUMMER 2002

**Instructor** Dr Barbara S. Pécherot Pettitt

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**Office Hours** Tuesdays from 3:00pm to 5:00pm  
Wednesdays from 3:00pm to 5:00pm  
Thursdays from 3:00pm to 5:00pm  
By appointment

**Class Hours** GM4201A2 on Tuesdays and Thursdays from 8:00am to 9:30am in LH 54  
GM4201E2 on Tuesdays and Thursdays from 9:40am to 11:10am in LH 54

#### Teaching Assistants

Paul Lazorisak E-mail: [plazorisak@global.t-bird.edu](mailto:plazorisak@global.t-bird.edu)

Office hours: Tuesdays from 1:00pm to 3:00pm, Snell 3

Review session: Wednesdays from 7:30pm to 9:30pm, Snell 22

Christopher Wackett    E-mail: [chriswackett@global.t-bird.edu](mailto:chriswackett@global.t-bird.edu)  
Office hours: Mondays from 12:00pm to 2:00pm, Snell 3  
Review session: Fridays from 2:00pm to 4:00pm, Snell 22

## 1. Description

This course consists of two modules:

- ◆ Module 1: **Valuation**. The objective is to understand the concept of the time value of money, to be able to value bonds and stocks, and to understand the basics of capital budgeting.
- ◆ Module 2: **Working Capital Management**. The objective is to study short-term and long-term planning, and to understand the models used in cash management and in credit management.

## 2. Materials

- ◆ **Textbook**            Stephen A. Ross, Randolph W. Westerfield and Jeffrey Jaffe (RWJ),  
**Corporate Finance**, 6th Edition, Irwin Mc-Graw Hill, 2001.
- ◆ **Case Pack**            It includes one case: **The Super Project** (Harvard Case # 9-112-034).<sup>1</sup>

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<sup>1</sup> After the fourth class, I will ask you to sign an affidavit that you have bought the case pack.

### 3. Calculator and Software

This course requires you to be capable of using:

- ◆ A financial calculator. I recommend the HP 17BII or the HP 19BII.<sup>2</sup>
- ◆ Excel and @Risk

### 4. Pedagogy

The course comprises 12 sessions: 11 sessions combine a lecture and problems on the “topic of the day” and one session is devoted to the Super Project. Before each session, you should read the assigned materials and prepare the assigned problem(s) or case.<sup>3</sup> After each session, my solutions to the problem(s) or case will be posted on My Thunderbird. They **must not** be distributed.

As “Finance I: Fundamentals” is a quantitative course, you are encouraged to practice some of the end-of-chapter problems of RWJ. The solutions to these problems are detailed in the Solutions Manual. During their review sessions, the TAs will debrief some of these problems.

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<sup>2</sup> I recommend the HP 17BII or the HP 19BII, because the TAs and I will be able to help you with these calculators. In particular: (1) **there will be a calculator tutorial on Friday, July 12, from 2:00pm to 4:00pm, in Lecture Hall 53** and (2) a note on “How to Use the HP 19BII” will be posted on My Thunderbird, in the folder “Notes”, file “HP19BII.pdf”.

<sup>3</sup> The questions for the problems and the case will be posted on My Thunderbird, in the folder “Assignments”, file “Assignments.pdf”.

## 5. Evaluation

### 5.1. Exams

There will be two exams:

- ◆ A one-hour mid-term exam, on **Saturday, July 20, from 10:00am and 11:00am, in AT&T**. You will be tested on the content of Sessions 1 to 4.
- ◆ A two-hour final exam, on **Tuesday, August 20, from 5:00pm to 7:00pm, in AT&T**. You will be tested on the content of the 12 sessions.

For both exams, you will be allowed to bring **one** dictionary, **one** calculator and **one** “cheat sheet”, i.e. an 8.5”x 11.0” sheet of paper, where you can write whatever you want. You will not be allowed to bring your computer.

### 5.2. Case

For the Super Project, you will have to work on a set of questions in groups of **two, three or four members**.<sup>4</sup> Each group will have to: (1) prepare a three-page write-up, which will summarize their assumptions, their results and their conclusions, and (2) build a model in Excel, and simulate it with @Risk. Each group should drop their write-up by my office and submit their Excel file to their drop-box on My Thunderbird by **Thursday, August 8, by 7:30am**. I will not accept any case after this deadline.

### 5.3. Participation

You are encouraged to participate during the class. However, as long as you come to class, participation will be considered as a bonus:

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<sup>4</sup> The members of the group must be registered for the same section (A2 or B2). No exceptions.

- ◆ If you come to class and you do not participate, your participation grade will be neutral, i.e. the weighted average of your grades for the exams and the case.
- ◆ If you come to class and you participate, your participation grade will be higher than the weighted average of your grades for the case and for the exams.
- ◆ If you miss more than two classes, your participation grade will be zero.

## 6. Grade

The final grade will be computed as follows:

- ◆ 60% for the exams (20% for the mid-term exam and 40% for the final exam)
- ◆ 30% for the case
- ◆ 10% for participation

If you disagree with your grade for the mid-term exam, the case or the final exam, you will have five business-days after I return the papers (for the exams) / write-ups (for the case) to contest your grade. You will have to re-submit the **original** paper / write-up, with a letter explaining the cause of your disagreement. At the end of the fifth business-day, I will re-grade your paper / write-up.<sup>5</sup>

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<sup>5</sup> I will re-grade the whole paper / write-up. Therefore, your grade might change, upwards or downwards.

## 7. Other Information

- ◆ You are required to adhere to the Honor Code. In particular, using materials from anybody other than yourself will be considered as a serious violation of the Honor Code.
- ◆ You are required to take the mid-term exam, to turn in your group write-up and to take the final exam. Otherwise, you would fail the course.
- ◆ In addition: (1) in class, display your name and (2) if you are late, do not come in, as it is disruptive for everybody. Thank you!

## SYLLABUS AT A GLANCE

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<b>Session</b>	<b>Date</b>	<b>Topic</b>	<b>RWJ</b>
1	Tu July, 9	Introduction	1-2
2	Th July, 11	Time Value of Money (1)	4
3	Tu July, 16	Time Value of Money (2)	4
4	Th July, 18	How to Value Bonds	5
<b>Mid-Term Exam</b>			
5	Tu July, 23	How to Value Stocks	5
6	Th July, 25	Miscellaneous	
7	Tu July, 30	Capital Budgeting (1)	6
8	Th August, 1	Capital Budgeting (2)	7-8
9	Tu August, 6	Long-Term / Short-Term Planning	26-27
10	Th August, 8	Capital Budgeting (3) *	
11	Tu August, 13	Cash Management	28
12	Th August, 15	Credit Management	29
<b>Final Exam</b>			

\* Your group should drop their write-up by my office and submit their Excel file to their drop-box on My Thunderbird by Thursday, August 8, by 7:30am.

## DETAILED SYLLABUS

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### **Session 1: Introduction** (Tuesday, July 9)

- ◆ Objectives: – To introduce the course
- To give an overview of Corporate Finance
- ◆ Preparation: – RWJ Chapters 1 and 2

### **Session 2: Time Value of Money (1)** (Thursday, July 11)

- ◆ Objectives: – To define the concept of interest
- To learn how to compute the present value and the future value of a cash flow
- ◆ Preparation: – RWJ Chapter 4, Sections 4.1 to 4.3
- Assignment for Session 2
- ◆ End-of-Chapter Problems: 4.1; 4.2; 4.3; 4.6; 4.14; 4.15; 4.18

### **Session 3: Time Value of Money (2)** (Tuesday, July 16)

- ◆ Objectives: – To learn how to compute the present value of a perpetuity, a growing perpetuity, an annuity and a growing annuity
- ◆ Preparation: – RWJ Chapter 4, Sections 4.4 and 4.5
- Assignment for Session 3
- ◆ End-of-Chapter Problems: 4.20; 4.22; 4.24; 4.26; 4.27; 4.29; 4.31; 4.36; 4.39; 4.45

#### **Session 4: How to Value Bonds** (Thursday, July 18)

- ◆ Objectives: – To learn how to value a bond
  - To define the yield curve
- ◆ Preparation: – RWJ Chapter 5, Sections 5.1 to 5.3
  - Assignment for Session 4
- ◆ End-of-Chapter Problems: 5.2; 5.5; 5.6; 5.9; 5.10

#### **Mid-Term Exam** (Saturday, July, 20)

#### **Session 5: How to Value Stocks** (Tuesday, July 23)

- ◆ Objectives: – To learn how to value a stock
  - To define the concept of growth
- ◆ Preparation: – RWJ Chapter 5, Sections 5.4, 5.5 and 5.9
  - Assignments for Session 5
- ◆ End-of-Chapter Problems: 5.14; 5.15; 5.17; 5.20; 5.24

#### **Session 6: Miscellaneous** (Thursday, July 25)

- ◆ Objectives: – To define the NPVGO model
  - To define spot rates and forward rates
- ◆ Preparation: – RWJ Chapter 5, Sections 5.6 to 5.10 and Appendix 5A
  - Assignments for Session 6
- ◆ End-of-Chapter Problems: 5.25; 5.30; 5.31; A1; A4

### **Session 7: Capital Budgeting (1)** (Tuesday, July 30)

- ◆ Objectives: – To learn how to value a project
  - To learn how to compute the payback period, the internal rate of return, the net present value and the profitability index and the equivalent annuity of a project
- ◆ Preparation: – RWJ Chapter 6
  - Assignments for Session 7
- ◆ End-of-Chapter Problems: 6.2; 6.4; 6.7; 6.9; 6.10 6.12; 6.15

### **Session 8: Capital Budgeting (2)** (Thursday, August 1)

- ◆ Objectives: – To learn how to compute the free cash flows of a project
  - To learn how to use @Risk
- ◆ Preparation: – RWJ Chapters 7
  - Assignments for Session 8
- ◆ End-of-Chapter Problems: 7.1; 7.3; 7.4; 7.11; 7.21; 7.27

### **Session 9: Long-Term / Short-Term Planning** (Tuesday, August 6)

- ◆ Objectives: – To define the concept of long-term planning
  - To define the concept of short-term planning
- ◆ Preparation: – RWJ Chapters 26 and 27
  - Assignments for Session 9
- ◆ End-of-Chapter Problems: 26.1; 26.4; 26.8; 27.4; 27.5; 27.10

**Session 10: Capital Budgeting (3)** (Thursday, August 8)

- ◆ Objectives: – To value a project, using Excel and @Risk
- ◆ Preparation: – Case: The Super Project
  - Assignments for Session 10

**Session 11: Cash Management** (Tuesday, August 13)

- ◆ Objectives: – To learn about the models used in cash management
- ◆ Preparation: – RWJ Chapter 28
  - Assignments for Session 11
- ◆ End-of-Chapter Problems: 28.2; 28.4; 28.7; 28.9; 28.14

**Session 12: Credit Management** (Thursday, August 15)

- ◆ Objectives: – To learn about the models used in credit management
- ◆ Preparation: – RWJ Chapter 29
  - Assignments for Session 12
- ◆ End-of-Chapter Problems: 29.1; 29.4; 29.7; 29.10; 29.12

**Final Exam** (Tuesday, August 20)