# Course Syllabus for FIN 4934 Financial Modeling in EXCEL 2017 Fall

#### **Instructor:**

Yao-Min Chiang

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Class schedule: Tuesday and Thursday during 9th and 10th periods, 4:05-6:00 pm

Location: Heavener 240. Office: Stuzin 315 B Phone: (352) 392-0153

Office hours: Tuesday and Thursday, 1:00-2:00 pm

### **Prerequisite:**

FIN 4243 and FIN 4504, or equivalent courses, as approved by the Heavener Undergraduate Programs Office

### Course overview and objective:

Welcome to this course. This course will teach you how to use EXCEL to discover, to analyze, and to solve financial problems.

Spreadsheets can be used for more than just creating tables and charts, and summarizing data. Instead of just storing, summarizing, and formatting data, a financial model is used for financial analysis. Spreadsheets are now commonly used for creating complex mathematical models. In this course, we will explain how to build financial models in Excel by providing instructions, not templates. We will learn to develop value-added skills in spreadsheet modeling of financial applications.

This is a course emphasizing on learning by doing. What you learn from this course will be very important for your career. The major software used in this course is Excel. We are going to use Excel as a tool to solve financial problems. Financial issues to be covered are capital budgeting, financial statement analysis, portfolio analysis, capital structure, dividend policy, bond management, option pricing, and option trading strategy. Excel functions and tools, such as Data Table, Goal seeker, Solver etc. will be used intensively. We will also introduce basic programming in VBA macro.

#### **Course materials:**

- 1. Textbooks: Benninga, Simon, "Financial Modeling", Fourth Edition, 2014.
- 2. Laptop/Excel. You must have and bring a Windows-based laptop to class that has Excel. If you have a Mac, you can use windows-based Excel in UF Apps.
- 3. Lecture notes and supplementary materials are available in the E-Learning course website. Please download the files before the class meeting.

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#### Homework:

There will be homework assignments probably once a week. I will assign homework on Thursday which will be due by class on next Thursday. Homework will be financial problems using EXCEL to discover, to analyze, and to solve them. Homework should be in professional report format, and must be completed individually. I will accept late homework, but I will subtract 10% from the grade for each day late. Homework is due by class time on Thursday.

Homework assignment must be hand-written and be turned in at a report format. Unless it is required by the instructor, homework is not turned in at electronic format. The idea of homework assignment is using EXCEL as a tool to help solve the financial problems. You use EXCEL to identify, to analyze, and to solve the homework problems. You make tables and figures to support your argument. You do not just turn in tables and figures made out of EXCEL. You must write down your argument, your reason, and your comment on the homework problems.

Remember, homework assignments must be turned before the beginning of class on Thursday. You are welcome to discuss homework with your classmates. However, you cannot just copy files from your classmates.

University of Florida Honesty Policy Regarding Cheating and Use of Copyrighted Materials Academic Honesty: As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." The following is from the University of Florida "Code of Student Conduct": Cheating The improper taking or tendering of any information or material which shall be used to determine academic credit. Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual(s) on a take-home test or homework when not specifically permitted by the teacher; looking or attempting to look at another student's paper during an examination; looking or attempting to look at text or notes during an examination when not permitted. The tendering of information includes, but is not limited to, giving of your work to another student to be used or copied; giving someone answers to exam questions either when the exam is being given or after taking an exam; giving or selling a term paper or other written materials to another student; sharing information on a graded assignment.

#### **Examination:**

We will have midterm examination and final examination. The examination will be online test at the classroom. Please bring your own laptops.

# **Course grades:**

Break down

Items	%
Homework	50%
Class participation	10%
Midterm examination	20%
Final examination	20%

## Grade scale

Point percentage	Grade
>=93%	A
90-92%	A-
87-89%	В
83-86%	B+
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-
67-69%	D+
63-66%	D
60-62%	D-
<=59%	F

# **Class Schedule**

No.	Date	Day	Agenda	Reading
1	2017/8/22	Tuesday	The time value of money	(B) Ch1, 31
2	2017/8/24	Thursday	The time value of money	(B) Ch1
3	2017/8/29	Tuesday	Mortgage analysis	(B) Ch1
4	2017/8/31	Thursday	Financial ratio analysis	(B) Ch5
5	2017/9/5	Tuesday	Capital budgeting	(B) Ch1
6	2017/9/7	Thursday	Capital budgeting	(B) Ch1
7	2017/9/12	Tuesday	Sensitivity analysis, Scenario analysis, Simulation	(B) Ch24
8	2017/9/14	Thursday	Statistics analysis and matrix operation	(B) Ch11, 24,32,33
9	2017/9/19	Tuesday	Statistics analysis and matrix operation	(B) Ch11, 24,32,33
10	2017/9/21	Thursday	Statistics analysis and matrix operation	(B) Ch11, 24,32,33
11	2017/9/26	Tuesday	Two-asset portfolio analysis	(B) Ch8,9,10,11
12	2017/9/28	Thursday	3-asset portfolio analysis: matrix and VBA	(B) Ch8,9,10,11
13	2017/10/3	Tuesday	3-asset portfolio analysis: matrix and VBA	(B) Ch8,9,10,11
14	2017/10/5	Thursday	3-asset portfolio analysis: matrix and VBA	(B) Ch8,9,10,11
15	2017/10/10	Tuesday	Review	
16	2017/10/12	Thursday	Midterm test	
17	2017/10/17	Tuesday	Capital structure	(B) Ch3

18	2017/10/19	Thursday	Capital structure	(B) Ch3
19	2017/10/24	Tuesday	Dividends Policy and practice	
20	2017/10/26	Thursday	Dividends Policy and practice	
21	2017/10/31	Tuesday	Interest rate models	(B) Ch22
22	2017/11/2	Thursday	Interest rate models	(B) Ch22
23	2017/11/7	Tuesday	Bond pricing and risk management	(B) Ch20,21
24	2017/11/9	Thursday	Option pricing: Black-Scholes model, Binominal model	(B) Ch15,16,17
25	2017/11/14	Tuesday	Option pricing: Black-Scholes model, Binominal model	(B) Ch15,16,17
26	2017/11/16	Thursday	Option trading strategy	
27	2017/11/21	Tuesday	Option trading strategy	
28	2017/11/23	Thursday	No class - holiday	
29	2017/11/28	Tuesday	MBS analysis	
30	2017/11/30	Thursday	Pivot tables & Financial games	
31	2017/12/5	Tuesday	Pivot tables & Financial games	
32	2017/12/7	Thursday	No class -reading day	
33	2017/12/12	Tuesday	Final exam	

## **Notes:**

- 1. Students with disability should come to me for appropriate arrangements.
- 2. We may adjust the course agenda based on students' learning progress.3. Please do not browse news, read emails, chat or text in social media during the class.