

FIN 4934
Applications of Financial Modeling

Course Syllabus
Spring 2017 Term

COURSE INSTRUCTOR

Professor John C. Banko, Ph.D., CFA
Senior Lecturer of Finance

Office: David Stuzin Hall, Room 321

Office Hours: By appointment

Phone: (352) 392-6395

E-Mail: john.banko@warrington.ufl.edu

COURSE LOCATION

FIN 4934 is being taught as an Electronic Platform (recorded) class. The class is taught in Heavener Hall, Room 150, every Monday and Wednesday, during Periods 3-4 (officially, 9:35-10:25 AM & 10:40-11:30 AM, but we will take only a short break between the two periods). Students are encouraged to attend the live sessions and actively participate. Seating is limited to 55 students and is on a first come, first served basis.

COURSE OVERVIEW AND OBJECTIVES

Purpose: The goal for this course is to develop the skills needed to use and create intricate spreadsheet models, geared toward the business community. The course will be project based, with a focus on mortgage-backed securities, securities modeling, financial statement cash flow modeling, and derivative modeling.

COURSE PREREQUISITE

FIN 4243 and FIN 4504, or equivalent courses, as approved by the College's Undergraduate Programs Office, Room 267 David Stuzin Hall, Phone: 273-0165.

COURSE MATERIALS TO PURCHASE FROM BOOKSTORE / ONLINE

The materials for the course will be:

1. Laptop/Excel. You must have and bring a Windows-based laptop to class that has Excel. Apple will not work, since you cannot run macros in Mac OS.
2. You will need simulation software. You have two several:
 - a. Simtools by Roger Myerson. This is an older simulation package developed by Nobel Laureate Roger Myerson. This can be accessed at this [link](#).
 - b. Crystal Ball. You can download a 30-day trial from Oracle. This can be accessed at this [link](#).
3. Coursepack from Harvard Business School Press. Instructions will be available on the course site in E-Learning.
4. Lecture Notes, available in the E-Learning course website.
5. A variety of chapters and full textbooks will be utilized throughout the term. All of them will be freely available through the UF libraries.

COURSE GRADES

Course grades will be calculated using points from each project. Our goal this term is to complete 6 projects. Each of the projects will have a few components, with different requirements, deadlines, and point assignments. Also, each of the 6 projects will have a peer review component.

Course grades will be based on the following numeric scale:

Minimum Points	Course Grade
90%	A
87%	A-
84%	B+
80%	B
77%	B-
74%	C+
70%	C

67%	C-
64%	D+
60%	D
57%	D-

The grade cutoffs may be adjusted down, particularly if assignments are more difficult than expected. Grade cutoffs will never be increased. Student grade information will be maintained in the Gradebook function in E-Learning.

COURSE TEAM PROJECTS

Course projects will be completed in teams, usually of 4 or 5 members. You will be assigned to one team for the first half of the term, up to spring break. And then you will be assigned to a different team for the second half of the course. Projects deliverables will be posted to E-Learning (which will list the exact date and time due). Part of the grading process is a peer review of the project.

These projects are expected to be professional work. Presentation is important. At a minimum:

- Where required, all text should be typed and presented in a case-like format.
- Spreadsheets and graphs should fit on one page or separated in a logical manner. They should be visually appealing, easy to read and incorporated into the text.
- You should include a cover page/tab with each person's name and project title.
- You should have subsections labeled with brief descriptions immediately preceding the spreadsheet and qualitative analysis.
- All spreadsheets should be labeled with a title and description.

In general, I should be able to read through the project and follow the analysis easily without referencing the assignment.

The project details may change during the course of the term. But, the plan right now is for the following projects:

1. Valuation model for an MBS (300 points total)

You will be given the layout for a MBS issued by Freddie Mac. Your job is to develop a valuation of the tranches. The primary deliverable is the Excel spreadsheet. A 1-page (or so) write-up will be required to explain tranches that are complicated and deserve some discussion.

2. Performance reporting and risk evaluation (150 points total)

For this project, your team will be given a Harvard case about a small asset management firm. Your job is to develop a 1-page (single-sided or double-sided, up to you) handout that the firm would use to summarize its investment philosophy and performance for the two funds it operates. These are known as “tear sheets”. You can (kind of) see examples of such 1-page documents by running a search for a “sample tear sheet” on any of the internet search engines.

I realize this is likely the first time many of you will tackle such an assignment. Your primary job is to get the numbers right – calculate the various portfolio fund performance measures as outlined in the case (correctly) and think about how to present them in a meaningful way. This will be an intermediate deliverable for this project.

More importantly, I want to see the performance report directly tied to the spreadsheet. If I update numbers on the spreadsheet, the performance report is updated as well. From there, develop bells and whistles to make the spreadsheet and report more usable and user-friendly.

The deliverable is the spreadsheet and the report that the spreadsheet creates.

3. Additional Funds Needed model (150 points total)

You will be given the financials and other relevant data for a corporation and/or a scenario. The project involves developing a model to determine the funding needs of the company. Valuation impact based on using debt versus equity will be examined. The deliverable is a 2-3 page executive summary of the results and scenarios. Results from your Excel spreadsheet should be incorporated as Exhibits, Tables, and/or Charts. The full spreadsheet will be also handed-in.

4. DCF / Pitchbook competition (150 points total)

Your team will be responsible for researching a firm and developing a DCF valuation of the firm. Then, your team will update a Powerpoint “pitch” presentation. You will then record a 10-minute presentation of the pitch. The deliverables will be the video and the PPT presentation.

5. Derivatives project (150 points total)

Details and deliverables TBA.

6. Creative case development/presentation and model (100 points total)

For the final project, your team will develop a spreadsheet model of your choice. Your team will develop the project scope and deliverables, and your team will present your project to the class via a prerecorded 10-minute presentation. The deliverables will be the video and spreadsheet.

For all cases, peer evaluations (of part of the project) are required. A 25-point penalty will be assigned for a late (by less than 24 hours) peer evaluation. A 50-point penalty will be assigned after 24 hours. Needless to say, this is a critical component of this class.

LYNDA.COM

Part of the goal of this course is to increase your Excel skills. In fact, to do well, you need to have some skills developed. If you find the first few lectures difficult to follow due to the Excel, UF has licensed Excel training videos from Lynda.com. This includes 6+ hour "introductory" videos on Excel.

Access is available on the UF website: <http://elearning.ufl.edu/>

STUDENTS WITH DISABILITIES

Students requesting accommodations for their disability must first register with the Dean of Students Office. The Dean of Students Office will provide documentation/forms to the student, who must then provide the documentation/forms to Dr. Banko. Please note that the Dean of Students Office requires a 7-10 day lead time to process your request after they receive the form back from you.

More information is available on the DRC website: <http://www.dso.ufl.edu/drc/>