FIN 294 Advanced Valuation and Financial Modeling
Monday & Wednesday 10:00am – 12:00am GSB 3.104

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CBA 2.244, 232-6821
Office Hours: Monday and Wednesday 5:00pm – 6:30pm

Description
This is a course about financial modeling. It covers a range of topics in the field of financial economics. Each topic was chosen because it lends itself to financial modeling. Class meetings are 110 minutes.

Likely topics covered:

- Loan Amortization Schedules
- Style Analysis
- Optimal Portfolio Selection
- “Waterfall”, tranches
- Fixed income derivatives
- Equity derivatives
- Visual Basic / automation of tasks
- Student topics of interest.

This is a “hands-on” course that requires students to analyze data and participate in class discussions. Course work is based on case studies, academic research, and practitioner research.

Modeling
This course is about financial modeling. The goal is to make financial models that produce useful answers to economic questions. The assignments are designed to be similar to assignments students will encounter in their future jobs. All assignments will be completed with Excel.

Pre-Reqs
Students must have a basic knowledge of Excel before starting the course. You should know the difference between absolute and relative references; be able to use common functions such as NPV, IRR, AVERAGE, STDEV, etc., and be able to plot data using Excel's functionality. For those who feel they do not have sufficient Excel experience I strongly recommend completing the Excel tutorials before the first class.

Readings
This course utilizes case studies, journal articles and handouts. Much of the material is posted to course website on Canvas. Some journal articles are a bit advanced and should be read (skimmed) for their main ideas rather than for details; I will make it clear when this type of article is assigned.

Grades
Class grades are based on four areas:
Class Participation 3%
Homework Assignments 60%
Internal Group Evaluation 2%
Exam 35%
You are responsible for all material covered in class, including assigned readings and exercises. When preparing for the exams, students should concentrate on the class notes and group projects.

Assignments
During the first meeting the class will be divided into groups of approximately four students. During the remaining classes, each group is responsible for bringing a working Excel model capable of answering questions associated with the exercise. The model should be designed to answer any assigned questions, but also flexible and capable answering a host of questions such as: “What if the tax rate changes to 38%?”. “What if the loan term is shortened to 10 years?”. A modest amount of group work helps ensure students are effective team members and leaders.

Each group should submit one model/assignment.

Exam
As a strict rule there are no “make-up” exams. It is your responsibility to schedule the rest of your activities such that you are able to attend the final exam.

Cases and Computer Codes
In the past, students have asked for handouts of the “correct” case analysis after a class discussion of the case. I, like other professors at top business schools, will not provide such answers for two reasons. First, the best cases are deliberately written to be ambiguous. While there are no right answers there are good and bad arguments. Handing out my analysis would reduce the ambiguity in the cases and partially defeat the purpose of doing the case in the first place. Second, when case analyses are handed out, these answers will eventually reach future students with probability one. This seriously impedes an open and rewarding case discussion and imposes huge negative externalities both on myself and others teaching these cases in the future.

Attendance
We expect students to attend each and every class meeting. A considerable amount of the material is covered in class and not in textbooks. Therefore, consistent attendance is a crucial element in maximizing learning. That said, we also recognize that myriad issues can arise during a semester (e.g., missed buses, oversleeping) that lead to absences. An excessive number of unexcused absences will be interpreted as a sign of neglect and lack of preparation, and can lead to a student being dropped from the course.

Other Policies
(1) Academic Dishonesty: Academic dishonesty, as defined by the Policy Statement on Scholastic Dishonesty for the McCombs School of Business, is not tolerated. We request all students to act as if bound by this policy. In particular, we expect that every individual assignment or examination consists entirely of your own work. **At no time should you exchange an electronic copy of your team’s assignment with any other team at any time.**

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the Policy Statement on Scholastic Dishonesty for the McCombs School of Business.

Professors agree to adhere to the responsibilities described in the policy statement. By enrolling in this class, students agree to observe all student responsibilities described in that document. If the application of the policy statement to this class and its assignments is unclear in any way, it is students’ responsibility to ask for clarification. One can refer to the Student Judicial Services website at http://deanofstudents.utexas.edu/sjs/ or the General Information Catalog to access the official university policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.
Students with Disabilities: The Provost’s Office offers the following statement to help inform students of available resources and to fulfill due diligence for Americans with Disabilities Act (ADA):

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

**Tentative Schedule and Class Topics**

*All Assignments are Due by the Start of Class on the Day Indicated (I will give you at least one week’s notice if I have to move an assignment)*

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<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Lecture / Reading Topic</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td>1</td>
<td>22-Oct</td>
<td>Cover Syllabus, Modeling, Excel Introduction, Comparable Basics</td>
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<tr>
<td>2</td>
<td>24-Oct</td>
<td>Comparables (Loan Basics)</td>
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<td>3</td>
<td>29-Oct</td>
<td>Comparables, Loans</td>
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<td>4</td>
<td>31-Oct</td>
<td>Firm Valuation Questions, Loan Analysis</td>
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<td>5</td>
<td>5-Nov</td>
<td>Loan Analysis</td>
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<td>6</td>
<td>7-Nov</td>
<td>Style Analysis (<a href="http://www.stanford.edu/~wfsharpe/art/sa/sa.htm">http://www.stanford.edu/~wfsharpe/art/sa/sa.htm</a>); Regressions in Excel</td>
<td>Loan Analysis</td>
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<td>7</td>
<td>12-Nov</td>
<td>Style Analysis</td>
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<tr>
<td>8</td>
<td>14-Nov</td>
<td>Style Analysis</td>
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<td>9</td>
<td>19-Nov</td>
<td>Portfolio Optimization</td>
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<td>10</td>
<td>21-Nov</td>
<td>Thanksgiving</td>
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<td>26-Nov</td>
<td>Portfolio Optimization / Macros</td>
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<td>12</td>
<td>28-Nov</td>
<td>Waterfall models</td>
<td>Portfolio APV/ NPV</td>
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<td>13</td>
<td>3-Dec</td>
<td>Waterfall models</td>
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<td>14</td>
<td>5-Dec</td>
<td>Equity Derivatives</td>
<td>Waterfall w/ Debt</td>
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<td>14</td>
<td>10-Dec</td>
<td><strong>In Class Exam</strong></td>
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