Course Syllabus
FIR 7840 – Quantitative Financial Applications
Spring Semester, 2016
3.0 Credit Hours

Instructor: Sandra Mortal, PhD
Phone: 901.678.4327
E-mail: scmortal@memphis.edu
Office: FCBE 207

Class Meetings: M 7:10 – 10:10 pm – FCB 123 (CAT lab)
Office Hours: M 2:00 to 3:45 pm or by appointment

Course Materials


– The textbook used in FIR 7155

– Daily reading of the Wall Street Journal or another financial publication is strongly recommended.

Location of Course Materials:

All course materials (lectures, discussion topics, news, etc.) are located on the eCourseware website.

Course Prerequisite

FIR 7155. I expect you to know what you learned in the introductory finance class. If this is only your second finance course, I expect this course will be a little challenging, but it will help you with your future finance classes. If you haven’t taken FIR 7155, you should drop from this course.
Course Objectives

The objective of this course is to help students develop financial modeling skills with Microsoft Excel. Students will learn to apply the concepts learned in the introductory courses into a spreadsheet model framework. The topics include valuation of cash flows, equity and fixed income securities, retirement planning, graphing in Excel, project cash flows calculation, capital budgeting and NPV analysis, sensitivity analysis, financial ratio analysis, cost of equity and beta estimation.

Fogelman College: Learning Outcomes for Your Degree

This course is designed to help you to meet the overall learning objectives for the MSBA degree offered by the Fogelman College. You should take the time to become familiar with the overall learning objectives as a student in the MSBA program:

http://www.fcbeassessment.net/LearningOutcomes/MSBADegreeLearningOutcomes.pdf

Course Methodology

Regular attendance and class participation are extremely important for the success of this course, students are held responsible for all materials, and assignments presented in class, as well as any administrative announcements. If for any reason you must miss class, you should get any relevant information from your colleagues.

There will be two mid-term exams and a final exam. The mid-term exams are not cumulative, although most of the concepts we cover are cumulative in nature. The final exam is comprehensive. There will be no make-up exams for any reason. The weight from a missed test will be transferred to the final exam provided there is a true emergency, such as a serious illness or a family emergency, and I approve such absence. If you expect to miss an exam for an approved reason, please let me know as soon as possible prior to the exam. You must provide me with a formal written note describing the situation before the exam, plus a note from a physician or other relevant person within one week following the missed exam. In addition to the exams, there will be several pop quizzes. They are intended to help you avoid procrastination. A student who misses an exam or quiz will automatically receive 0% for that exam or quiz.

Grading and Evaluation Criteria

Final course grades are earned according to the following table:
Your overall grade for the semester is based on how well you perform on a mixture of formal activities including discussions, quizzes and projects. A detailed description of each of the assessed activities can be found after the scoring summary table below.

You are welcome to talk to me about grading. It is extremely important to me to be fair, which in this context means treating people consistently. Therefore, when I grade written assignments I attempt to grade them all at the same time so I can apply identical standards as consistently as possible. If you think that there are grading errors on your tests (assignments) or your grade on an exam (assignment) does not reflect the quality of your performance, submit the entire exam (assignment) together with a written explanation of your reasoning the day I handout the exam (up to a week after I handout the assignment). An exam (assignment) submitted for re-grading will be subject to a complete re-grade.

I want to help you learn and achieve the grade that you wish. I will, of course not be able to assign you a grade that does not reflect your performance, but I encourage you to use my office hours to advance your learning. I have high, but I believe reasonable expectations for the students. I strive to teach this course similar to how it is taught at the top business schools in the country.

**Final Course Grades**

Points earned on the assessed activities will be distributed as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weights</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>25%</td>
<td>Mon, Feb 22</td>
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<tr>
<td>Test 2</td>
<td>25%</td>
<td>Mon, March 28</td>
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<tr>
<td>Final exam</td>
<td>25%</td>
<td>Mon, May 2 (8:00 to 10:00 pm)</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Bloomberg certifications</td>
<td>10%</td>
<td></td>
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<tr>
<td>Participation, attendance &amp;</td>
<td>5%</td>
<td></td>
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<tr>
<td>homework</td>
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**Course Topics**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Bloomberg tutorial and certifications</td>
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<tr>
<td>Unit 2</td>
<td>TVM and financial planning</td>
</tr>
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<td>Unit 3</td>
<td>Capital budgeting</td>
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<td>Unit 4</td>
<td>Indices</td>
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<td>Unit 5</td>
<td>Risk, returns, beta, and a simple event study</td>
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<td>Unit 6</td>
<td>Talk about the EMH, view the prospectuses of some mutual funds, discuss some academic papers and back-test some trading strategies: momentum, asset growth, value/growth, short selling</td>
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<tr>
<td>Unit 7</td>
<td>Bond valuation, duration, convexity and immunization</td>
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<td>Unit 8</td>
<td>Ratio analysis for a firm of your choosing.</td>
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<td>Unit 9</td>
<td>Valuation of a firm</td>
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<td>Unit 10</td>
<td>Portfolio performance evaluation and evaluation of some actual mutual funds</td>
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<tr>
<td>Unit 11</td>
<td>TBA</td>
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**Course Policies**

**E-MAIL:**

All students are required to maintain and access their University of Memphis (@memphis.edu) email account. You will receive all official course correspondence at this email account. Any inability to receive incoming mail in a timely fashion (e.g., not regularly checking your email, having a “full mailbox” condition, etc.) is the student’s responsibility.

**Attendance:**

Regular *attendance* and class *participation* are extremely important for the success of this course, and attendance will be taken. Students are held responsible for all materials, and assignments presented in class, as well as any administrative announcements. If for any reason you must miss a class, you should get any relevant information from your colleagues.

**Adding/Dropping:**

If you have questions about adding or dropping classes, please refer to this page on the Registrar’s website.

**Academic Integrity:**
The University of Memphis has clear codes regarding cheating and classroom misconduct. If interested, you may refer to the Student Handbook section on academic misconduct for a discussion of these codes. Note that using a “Solutions Manual” is considered cheating. Should your professor have evidence that using a “Solutions Manual” has occurred, he/she may take steps as described on the campus’ Office of Student Conduct website. If you have any questions about academic integrity or plagiarism, you are strongly encouraged to review the Fogelman College's Website on Academic Integrity.

Late Assignments:

Assignments and projects may be submitted anytime up to and including the date and time due. Please review all information in this syllabus and related “Course Activity Summary / Schedule” for all due dates for formally assessed work. Late assignments will be severely penalized and will result in a score of zero, unless s/he can present an acceptable excuse.

Extra Credit:

There is no extra credit offered in this course. Your final grade will be computed based on your work on the formal/assessed activities previously described in this syllabus.

Reporting Illness or Absence:

Due dates and deadlines have been established for each graded assignment. In this course, deadlines are taken very seriously. Please do not wait until the last day to submit assignments or to take quizzes and exams. If an emergency should arise, it is the student’s responsibility to contact the instructor prior to the deadline to discuss the matter. A deadline extension will be considered only if all of the following conditions are met: (1) Extreme emergency and (2) Instructor contacted prior to the due date.

Inclement Weather:

In the event that inclement weather requires the cancellation of classes at The University of Memphis, local radio and television media will be immediately notified. Additionally, The University of Memphis has established an Inclement Weather Hotline at 678-0888 as well as TigerText, an emergency alert text messaging service to students, faculty and staff. This optional service is used in the event of an on-campus emergency, an unscheduled university closing, or a delay or cancellation of classes due to, for instance, inclement weather. Click Here for information on TigerText.

Syllabus Changes:
The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting.

**Student Services**

Please access the [FCBE Student Services](#) page for information about:

- Students with Disabilities
- Tutoring and other Academic Assistance
- Advising Services for Fogelman Students
- Technical Assistance