COURSE SYLLABUS
Course: **FINN 3103 Financial Modeling**
Prerequisite: WCOB 2043

Course Description:

Develop strong computer skills in financial analysis by integrating conceptual material with spreadsheet-based numerical solution and simulation techniques.

COURSE OBJECTIVES:

This course is meant to help you build, understand, and use tools prevalent in applied finance. You will be doing things that practitioners do. This means that this course helps you prepare for real world applications of corporate finance and investments. Over the past few decades Excel has become a ubiquitous tool for modeling and financial decision making. A strong familiarity with Excel is a must in the business world. This course will help you build familiarity and confidence. You will complete and apply models used in typical finance and investments practice. Topics include the time value of money, financial statement analysis, project analysis, capital budgeting, portfolio analysis, and securities and options valuation.

TEXT BOOKS:

Required: Benninga, Simon. *Principles of Finance with Microsoft Excel, 2nd Edition*, 2011

Reference Texts:
Bodie, Kane, and Marcus. *Essentials of Investments*
Ivo Welch. *Corporate Finance, 2nd Edition*. Note: This book is FREE on the web at http://book.ivo-welch.info.

TOOLS:

We primarily use Microsoft Excel, though we will explore Bloomberg as well. Though any type of programming is not a prerequisite for this course it is strongly suggested that you familiarize yourself with Excel *before* taking the course. Opening, closing, saving spreadsheets, manipulating cells, using the formula wizard, and other basics I assume you already know.

PREREQUISITES:

This course is primarily focused on modeling as opposed to theory. I expect that students are well familiar with finance topics before trying to model finance problems. What do we mean by the time value of money? What is capital budgeting? When evaluating project payoff, why would we care about the choice of the discount rate used? What is the 'efficient frontier' in portfolio analysis? Why are options payoffs non-linear? What do we mean by bond duration analysis? If any of these topics are unfamiliar I suggest you refresh your memory using the reference materials or notes/texts from your previous classes. It will be very difficult to learn finance and investments theory while also learning modeling, though it can be done.

CLASS PROCEDURES:

This is not a lecture course. While I will introduce some topics with slides, the bulk of our time will be spent building models and utilizing Excel, internet resources, and Bloomberg. This course is a hands-on practice seminar. Each class I intend to briefly give background information – the *why* of the model – and then demonstrate how the model works. Students will be assigned a number of examples/models to complete both in and outside of class. The text and the accompanying CD are very thorough and provide you excellent templates and tools. I will facilitate your learning experience, though by far the best teacher of modeling is practice, practice, and more practice.

GRADING:

Your final course grade will be determined as follows:

Attendance and class participation	20%
Assignments	30%
Exam 1	20%
Exam 2	30%

Assignments will be announced in class and available in Blackboard as of the end of each class. Homework assignments are to be completed individually and submitted via Blackboard's *Assignment* link. Due dates will be announced in class and are also available in Blackboard. Late submissions are graded with penalties.

You own your grade. There will be ample feedback with regard to grading as we progress throughout the semester. Generally, homework grades are representative of your likely overall grade. Students who do their homework are more likely to know what to do on exams. Students who choose not to do homework and/or attend class frequently fail the course. You will not be surprised by your grade, as I will post and update grades in a timely manner. You have three business days from the due date of any assignment to speak with me about your submission and grade, after which the grade is finalized and not subject to review. If you want 'finalized' grades reviewed I will re-grade all of your previous work – your grade(s) may go up or down. Finally, your grade is subject to rounding such that a 79.49999999 is a "C". An 89.500001 is an "A".

EXAMS:

There will be two graded exams. Both are in-class exams. Both will be a mixture of modeling problems and explaining why and how a model is used (in essay format). Exam dates are as below. If you have final exam conflicts as per University policy it is your responsibility to notify me as soon as possible. Exams are 'closed book'. You will not be permitted any resources other than the tool (Excel) used to complete the exercises.

You must take both exams to receive a passing grade.

ATTENDANCE AND PARTICIPATION:

By my count there are 43 classes this semester for our section. The attendance policy is very simple: you will receive 1 point for each class you attend. Your final attendance grade will be your attendance points divided by the number of possible points, adjusted for excused absences and cancelled classes, if any. Participation is less 'measurable' and I reserve the right to grade

your participation not on the frequency but on the quality of your participation. Do not be afraid to participate. This is a workshop course and we all learn by trying new things. If you have a question, ask. Other people will appreciate that your question resulted in clarification for all.

ACADEMIC DISHONESTY:

It is assumed that everyone behaves ethically. This class will follow the University of Arkansas policy concerning academic dishonesty. See the current University of Arkansas student handbook for the University Policy on this matter.

INCLEMENT WEATHER POLICY:

If the University is officially closed we will not have class. Any other class cancellations will be announced via Blackboard and University email.

REQUEST FOR ACCOMMONDATIONS:

Students with disabilities or with any other special needs should contact me as soon as possible in order to make any necessary arrangements.

DISCLAIMER:

I reserve the right to change the syllabus as desirable and necessary throughout the semester.

PRELMINARY COURSE OUTLINE

Week		Topics	Readings:	Week		Topics	Readings:
Week 1				**3/19 to 3/23 SPRING BREAK**			
Monday	16-Jan			**Week 10**			
Wednesday	18-Jan	Introduction		Monday	26-Mar	Bond Valuation	Ch. 15
Friday	20-Jan	Excel	Ch 24, 25	Wednesday	28-Mar	Bond Valuation	Ch. 15
Week 2				Friday	30-Mar	Stock Valuation	Ch. 16
Monday	23-Jan	Time Value of Money(TVM)	Ch. 2	**Week 11**			
Wednesday	25-Jan	TVM	Ch. 2	Monday	2-Apr	Stock Valuation	Ch. 16
Friday	27-Jan	IRR	Ch. 3	Wednesday	4-Apr	Options, the basics	Ch. 20
Week 3				Friday	6-Apr	Options, cont.	Ch. 20
Monday	30-Jan	AIR, EAR, and e^{rT}	Ch. 3	**Week 12**			
Wednesday	1-Feb	Intro to Capital Budgeting	Ch. 4	Monday	9-Apr	Options, cont.	Ch. 21
Friday	3-Feb	Capital Budgeting / NPV	Ch. 4	Wednesday	11-Apr	Portfolio Project	Ch. 21
Week 4				Friday	13-Apr	Portfolio Project	
Monday	6-Feb	Project NPV		**Week 13**			
Wednesday	8-Feb	Project NPV		Monday	16-Apr	Real Options	
Friday	10-Feb	Breakeven Analysis		Wednesday	18-Apr	Bi-nomial option pricing	Ch. 23
Week 5				Friday	20-Apr	Bi-nomial option pricing	Ch. 23
Monday	13-Feb	FCF and WACC	Ch 6.	**Week 14**			
Wednesday	15-Feb	Corporate Financial Planning	Ch. 7	Monday	23-Apr	Black Scholes	Ch. 22
Friday	17-Feb	Corporate Financial Planning		Wednesday	25-Apr	Black Scholes	Ch. 22
Week 6				Friday	27-Apr	Catch up / review	
Monday	20-Feb	Corporate Financial Planning	Ch. 7	**Week 15**			
Wednesday	22-Feb	Corporate Financial Planning	Ch. 7	Monday	30-Apr	Catch up / review	
Friday	24-Feb	Catch up / Homework Reviews		Wednesday	2-May	REVIEW	
Week 7				**Friday**	**4-May**	**DEAD DAY**	
Monday	27-Feb	Review					
Wednesday	29-Feb	**EXAM 1**		**Monday**	**7-May**	**FINAL EXAM, 8-10 a.m.**	
Friday	2-Mar	What is Risk?	Ch. 8				
Week 8							
Monday	5-Mar	Porfolio Statistics	Ch. 9				
Wednesday	7-Mar	Porfolio Statistics	Ch. 9				
Friday	9-Mar	Intro to Bloomberg					
Week 9							
Monday	12-Mar	Efficient Markets	Ch. 14				
Wednesday	14-Mar	Efficient Markets	Ch. 14				
Friday	16-Mar	Portfolio Project - in class help					

This schedule is tentative and will be adjusted given the pace of in-class work and your level of mastery. Ultimately, you want to build as much skill in as many different models as possible – it's good for your future job search and security!