UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN College of Business Department of Finance

Department of Finance

Finance 501: Financial Economics

SYLLABUS

Fall 2010 Professor: Nolan Miller Office: 4033 BIF Office hours: Tuesday/Thursday 4:00 – 5:00

Phone: 244-2847

http://compass.illinois.edu Email: nmiller@illinois.edu

SECTIONS AND ROOMS:

SECTION	DAYS	TIME	LOCATION
FE	Tues./Thurs.	8:00 - 9:20	240 Wohlers
MS1	Tues./Thurs.	9:30 - 10:50	240 Wohlers
MS2	Tues./Thurs.	12:30 - 1:50	3007 BIF

There will also be occasional, optional sessions on Fridays, conducted by the teaching assistant. These sessions will take place in 240 Wohlers Hall from 10:00 - 11:50. NOTE: the sessions may be divided into two 50 minute presentations of the same material. The review sessions will be led by the teaching assistant, Nasrin Sarrafi, who can be contacted at sarrafi@uiuc.edu.

COURSE OBJECTIVES: Microeconomics is the intellectual foundation for the field of finance. This course is designed to give you a strong understanding of the theory and logic of microeconomics. We will discuss the standard models of how consumers and producers behave, and the implications of these models for resource allocation and market efficiency. We will also discuss the basic tools of microeconomics, including optimization, comparative statics and equilibrium. Applications to finance will be highlighted throughout the course, and special attention will be paid to how the tools of economics can be applied to problems in finance and business more generally.

The course is divided into four parts. The first part (Markets) focuses on the fundamentals of markets and why, under ideal circumstances, markets allocate resources efficiently. We will also focus on applications of this material to finance, with particular emphasis on the economics of time and risk. The second part (Market Failures) considers departures from ideal circumstances and how such departures can lead to inefficiencies. Such inefficiencies are often the targets of financial innovations (e.g. new securities) that aim to reduce the magnitude of the market failure and have the dual benefit of reducing inefficiency and improving profit. The final two parts look at situations to which the theory of competitive markets is less applicable. The third part considers game theory and strategy, which applies to situations where there are a small number of actors. The fourth part briefly considers basic issues in macroeconomics.

AUDIENCE: This is a required course for students in the MSF and MSFE programs. A limited

number of graduate students from other programs may be admitted with consent of the instructor. Non-MSF/E students should contact me as soon as possible.

PRE-REQUISITES: If you are in the MSF or MSFE programs, this is not relevant. The course tries to be largely self-contained. However, a certain comfort with mathematical reasoning and familiarity with calculus will be helpful. Early in the semester there will be a review session dedicated to refreshing important mathematical concepts. In general, I will use calculus from time to time, (partial derivatives in particular) and I will use math when I think it helps make the ideas clearer. However, although this material can be presented in a highly mathematical way, it is not my intention that this be a course in mathematical economics. If you feel you lack some of the background needed to succeed in this course, you should contact me as soon as possible.

TEXT: You will not be assigned problems from the text, nor will I ask you about material that was not covered in lectures. Therefore, arguably any good micro text will work for this course. However, in order to provide some structure to the course, the main text for the course will be *Microeconomic Theory: Basic Principals and Extensions*, by Walter Nicholson and Chris Snyder. The current edition is the 10th, although any recent edition should be very similar. *Microeconomic Theory* (MT) is a calculus-based text. Students who are not as comfortable with calculus might consult *Intermediate Microeconomics* by the same authors. *Microeconomic Theory* (MT) and *Intermediate Microeconomics* (IM) cover the same material at two different levels and work well together as a team. The IM book is written using a lower level of mathematics than we will use in this course. It is, however, generally well written and provides good intuitive explanations of material. The MT text, on the other hand, presents some ideas at a somewhat higher level of mathematics than you will need in this course.

COURSE WEB SITE: This course will make extensive use of the Compass web platform. Compass is available at http://compass.illinois.edu. Lecture slides, problem sets and solutions, and supplemental readings and handouts will be posted on the course web site. Course announcements will also be posted there. Please check the course web site regularly. In order to keep your costs down, I will try, as much as possible, to limit the amount of paper the course generates by posting materials online and using materials that are available for free through the university's online resources.

GRADING: Points for the course will be allocated as follows:

	% of course grade
Assignments / Problem Sets	25%
Midterm Exam I	20%
Midterm Exam II	20%
Final Exam	30%
Participation	5%

The plus/minus system will be used when assigning final course grades. Grades will be posted on Compass.

ASSIGNMENTS/PROBLEM SETS: Periodically during the semester you will be given assignments to work on outside of class. Assignments will be due approximately every two weeks, and you will be given at least one week after the assignment is made available before it is due. Due dates are printed on the detailed course plan. The problems on these assignments will sometimes be more difficult than the examples we have done in class, and will also sometimes be more difficult than the types of questions you will likely see on the exam. This is done intentionally to challenge you to think about the course material at a deeper level.

You are *strongly* encouraged to work on the assignments with your study group. However, you must write up your answers independently and turn in separate work. **Photocopies or multiple printouts of essentially the same computer file do not qualify as "separate work."** While numerical results may look identical for individuals in the same study group, each person must write his answer and accompanying explanations separately. That is, you should *provide your answers in your own words*. If presentation and written explanations are too similar; they will receive no credit. Please include the names of the members of your study group on your assignment when you hand it in.

IMPORTANT NOTE: Assignments are due EITHER a) in class at the beginning of class, OR b) in my faculty mail-box in 340 Wohlers Hall by 3:00 PM on the due date. *No late assignments will be accepted!*

Problem sets will be graded on a 10 point scale. Students who turn in the assignment on time and make an honest effort at all of the questions should receive most of the credit.

In computing the contribution of the assignments/problem sets to your final grade, **I will drop the lowest of your assignment grades.** Thus, if there are seven assignments, your overall problem set grade will be based on your six best assignments. Because of this, students who fail to turn in an assignment on time should consider that to be their dropped assignment. Although a student may choose not to complete an assignment, it is strongly recommended that you complete all of the assignments.

EXAMS: The course will have two midterm exams and a final exam scheduled by the College. Sample exams will be made available on Compass before each exam. Review/question sessions will be scheduled before each exam (either in class, during the Friday session, or during a special meeting).

MIDTERM EXAMS: The midterm exams are scheduled for Thursday, September 23, 2010 and Thursday, October 28, 2010. For the MSFE section (8:00 - 9:20), the midterm exam will be held during the regular class time. For the MSF sections (9:30 - 10:50; 12:30 - 1:50), the exam will take place in the EVENING, from 7:00 - 8:20 in Mumford Hall Room 103. Details will be distributed shortly before the exam. The first midterm will cover material from the beginning of the course. The second midterm will focus on material between the first and second midterms.

<u>FINAL EXAM:</u> The final exam for this course will be at a time scheduled by the College/University during the final exam period. THE FINAL EXAM FOR THIS COURSE IS CUMULATIVE, COVERING MATERIAL FROM THE ENTIRE COURSE. PLEASE KEEP THIS IN MIND AS THE SEMESTER PROGRESSES.

Absences from midterm exams must be approved in advance by me, and will only be granted in extremely exceptional circumstances. If you are unable to attend one of the evening exams, contact me as soon as possible to make alternative arrangements. Final exams will be dealt with according to University policy.

CLASS PARTICIPATION: I do not take attendance, but attendance is highly encouraged. Positive participation in class through participation in discussions, asking questions and contributing examples and relevant current events is encouraged, but I am primarily concerned with discouraging behavior that could distract us from the material at hand. This is a large class, and small disruptions can quickly become large ones. My goal (and my job) is to create a classroom environment where everyone can learn. Actions that prevent others from learning, including arriving late for class, use of laptops for activities unrelated to the course, etc., will be noted. Please do your best to silence your cell phone before the start of class. Well-intentioned questions related to what we are studying are not distractions and are, in fact, encouraged.

ACADEMIC INTEGRITY: From the University statement on your obligation to maintain academic integrity: "If you engage in an act of academic dishonesty, you become liable to severe disciplinary action. Such acts include cheating; falsification or invention of any information or citation in an academic endeavor; helping or attempting to help others commit academic infractions; plagiarism; offering bribes, favors, or threats; academic interference; computer-related infractions; and failure to comply with research regulations."

Part 4 of the Student Code gives complete details of rules governing academic integrity for all students. You are responsible for knowing and abiding by these rules. Infractions will be dealt with according to published procedures.

MSF/MSFE students are also reminded of their obligations under the Honor Code and Code of Conduct.

<u>DISABILITIES:</u> To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require reasonable accommodations to participate in this class are asked to see me as soon as possible.

OFFICE HOURS: Office hours are listed above; if any changes become necessary, they will be posted on the course web site. Office hours are for your benefit, so feel free to use them! No appointment is necessary during office hours. If you cannot come to these office hours, please make an appointment for another time by sending me an email.

REVIEW AND "CATCH-UP" SESSIONS: In addition to the regular lectures, there will be *occasional* and *optional* sessions on Fridays led by me or by the teaching assistant, scheduled to take place in 240 Wohlers Hall from 10:00 – 11:50. The sessions will most likely be divided into two 50 minute presentations of the same material. Some sessions will be used to go over problem sets; others are intended as "catch-up" sessions where students without previous background in economics can go over the most basic material and receive more detailed answers to their questions.

<u>DETAILED COURSE PLAN:</u> The detailed course plan will be posted on compass in a separate document and updated throughout the semester.