

MIDDLE EAST TECHNICAL UNIVERSITY
DEPARTMENT OF BUSINESS ADMINISTRATION and
INSTITUTE OF APPLIED MATHEMATICS

SPRING 2005

BA 4825/5825 - FINANCIAL DERIVATIVES
IAM 520 – FINANCIAL DERIVATIVES

M, W: 11:45 - 13:00 (G 107, FEAS - B)

Instructor	Office	Phone	E-mail	Office Hours
Dr. Z. Nuray Güner	FEAS - B H 113	210 3075 210 2033	nguner@ba.metu.edu.tr	T: 16:15 – 17:30 Th: 16:15 – 17:30
Dr. Adil Oran	FEAS - B H 114	210 2041	adil@ba.metu.edu.tr	M: 14:45 – 16:00 Tu: 14:45 – 16:00

Course Web Page: <http://www.ba.metu.edu.tr/~adil/ba4825/>

OBJECTIVES OF THE COURSE:

This course is designed to provide a solid foundation in the principles of derivatives. It attempts to strike a balance between institutional details, theoretical foundations, and practical applications. Parallel to the already increasing attempts to integrate derivative securities and markets into the Turkish financial system, it is believed that this course will fill a gap in that students will be exposed to a rather comprehensive coverage of theory and application in the derivatives area. This course is expected to give the students a “competitive advantage” when they enter the job market since “derivatives” is a “hot topic” nowadays and BA4825/5825/IAM520 is one of the very few courses offered on this topic in Turkey!

PREREQUISITE:

The students who have completed any one of the following courses with a minimum semester grade of DD are allowed to register for this course:

BA 2802 or BA 5802 or IAM 521.

TEXT BOOK:

Chance, D.M. An Introduction to Derivatives and Risk Management, 6th Edition, Thomson/South Western, USA, 2004.

This book is available for sale at the METU Bookstore. The 6th and prior editions are also available for checkout at the Reserve Desk of METU Muhan Soysal Library located at the FEAS – B building, G Wing, Floor 2 (Call number: HG6024 A3 C48 2001).

SUPPLEMENTARY BOOKS:

You will need a lot of practice to feel comfortable with solving problems on options, futures and other derivatives. The METU Library carries a variety of books written on derivatives. It is a very good idea to check out some of these books and exercise your brain muscle by solving the end-of-chapter problems that are provided in these books.

EXAMS:

There will be two midterms and a final. The exam schedule is as follows:

1st Midterm:	Monday, March 25, 2004, 17:45 – 20:00
2nd Midterm:	Monday, April 29, 2004, 17:45 – 20:00
Final Exam:	Tuesday, June ?, 2004, 16:30 - 19:00

GRADING:

Your total score in the course will be determined by the following weights:

Written Assignments =====	10%
Midterm 1 =====	20%
Midterm 2 =====	20%
Final =====	50%

No “extra” work above the aforementioned will be accepted or credited.

Makeup Examinations: There will be no make-ups for exams or homework assignments. You may be allowed to miss an exam under the most extreme circumstances and only after stringent verification and approval by the Department. If you do miss Exams 1 or 2, the weight of the exam will be equally divided between the other two exams that you take. For example, if you miss Exam 1, its weight of 20 percent will be divided equally between Exam 2 and the Final Exam so that these exams will have the weights of 30 and 60 percent, respectively.

PRESENTATION SLIDES:

A copy of the presentation slides is available at the course web page. These slides can be used as chapter summaries and utilized while taking notes during class.

OTHER NOTES:

- Smoking and usage of beepers or cellular phones are not allowed during the class.
- Please arrive on time and do not enter the classroom after we already have entered. If you have to leave early, please inform us in advance.
- The homework assignments are due at the beginning of the class period. Please note that no late assignments (no matter how late) will be accepted once the class starts.
- You are encouraged to drop by our office during office hours for questions, concerns, or, suggestions. Outside the office hours, please make an appointment with us in advance, before or after the class, via phone or e-mail.

Good luck to all of you!!

ZNG, AO.

The following pages give the schedule for the reading assignments. The lectures will stress the most important and/or most difficult material. Appendices are required only if they are assigned. The students are required to read the chapters and appendices before they are covered in class.

Tentative Course Schedule

Month	Day	Topic	Readings	HW Assignments
<u>Dr. Oran</u>				
February	21	Introduction The Structure of Options Markets	Chp 1 Chp 2	TBA
	23	Cont'd The Structure of Options Markets	Chp 2	
	28	Principles of Option Pricing	Chp 3	
March	2	Cont'd Principles of Option Pricing	Chp 3	
	7	Option Pricing Models: The Binomial Model	Chp 4	
	9	Cont'd Option Pricing Models: The Binomial Model	Chp 4	
		Option Pricing Models: The Black-Scholes Model	Chp 5	
	14	Cont'd Option Pricing Models: The Black-Scholes Model	Chp 5	
	16	Basic Option Strategies	Chp 6	
	21	Cont'd Basic Option Strategies	Chp 6	
	23	Cont'd Basic Option Strategies	Chp 6	
	25	Exam 1 17:45 – 20:00 Chps 1, 2, 3, 4, 5, 6		
	28	Advanced Option Strategies	Chp 7	
	30	Cont'd Advanced Option Strategies	Chp 7	
April	4	Cont'd Advanced Option Strategies	Chp 7	
		The Structure of Forward and Futures Markets	Chp 8	
	6	Cont'd The Structure of Forward and Futures Markets	Chp 8	
Extra class	8	Cont'd The Structure of Forward and Futures Markets	Chp 8	
<u>Dr. Güner</u>				
	11	Principles of Forward and Futures Pricing	Chp 9	
	13	Cont'd Principles of Forward and Futures Pricing	Chp 9	
	18	Cont'd Principles of Forward and Futures Pricing	Chp 9	

Month	Day	Topic	Readings	HW Assignments
	20	Futures Hedging Strategies	Chp 10	
	25	Cont'd Futures Hedging Strategies	Chp 10	
	27	Cont'd Futures Hedging Strategies	Chp 10	
	29	Exam 2 17:45 – 20:00 Chps 7, 8, 9, 10		
May	2	Advanced Futures Strategies	Chp 11	
	4	Cont'd Advanced Futures Strategies	Chp 11	
	9	Cont'd Advanced Futures Strategies	Chp 11	
		Options on Futures	Chp 12	
	11	Cont'd Options on Futures	Chp 12	
	16	Foreign Currency Derivatives	Chp 13	
	18	Cont'd Foreign Currency Derivatives	Chp 13	
	23	Cont'd Foreign Currency Derivatives	Chp 13	
		Interest Rate Derivatives	Chp 14	
	25	Cont'd Interest Rate Derivatives	Chp 14	
Extra class	27	Cont'd Interest Rate Derivatives	Chp 14	
June	?	Final Examination 16:30 – 19:00 {Chps 1, 2, 3, 4, 5, 6} 20% {Chps 7, 8, 9, 10} 20% {Chps 11, 12, 13, 14} 60%		