COURSE: ACSI 4630/5630: Mathematics of Risk, options and derivatives
   Graduate credit is earned by doing a project, and registered as a graduate student.
   A project will be assigned after mid-semester.

Meeting Times: MW 4:10 p.m. - 5:35 p.m.

Location: Main Campus, Kirksey Old Main, KOM 205

PREREQUISITES: ACSI 4200/5200, or consent of instructor.

TEXT BOOK: Derivative Markets (Second Edition) by Robert L. McDonald, Addison Wesley

Other Useful Text: Options Futures and other Derivatives, by John C. Hull, Pearson/Prentice.

INSTRUCTOR: DR. A. Khaliq, KOM-250, Phone: +1 615-494-8889
   E-Mail: akhaliq@mtsu.edu

OFFICE HOURS: 1:30-3:00 P.M. MW, and/or any other time by appointment.

CONTENT: First 8 chapters from the McDonald book which will cover Financial Economics part in FM exam. Topics on Risk analysis; VAR, CVAR, CAPM, and Efficient Frontier

OBJECTIVES: The objective of the course is to cover the syllabus of Financial Economics part in FM exam and study of Financial Risk models. Excel will used for the modeling and analyses of financial risk.

GRADING: 90-100% A; 80-89% B; 70 - 79% C; 60 - 69% D; 00 - 59% F

Based on the following instruments:
   Tests: 60%
   Assignments using Excel: 15%
   Final Exam: 25%

3 Tests
(September 26, October 31, November 28)

You will be given three tests during the semester. These will be in class closed-book tests; calculators are permissible. Each test will carry equal weight, and will cover all of the material learned up to and including one day before the exam. Cheating during the tests would not be tolerated. Cheating cases will be brought into attention of appropriate MTSU authorities. Please turn all cell-phones off during the test.
Assignments

You will be given about 10 assignments during the semester. There will be some challenging problems mostly from previous MF&MFE exams. You should strive to start the assignment the day it is assigned. Be detailed in your explanations; a lone numerical answer never suffices. Cheating is not to be tolerated, and will be dealt according to MTSU policy.

Final Exam:

| Monday, December 10 | 3:30-5:30 p.m. |

Final exam will be comprehensive, closed book exam and will be only given according to MTSU Final exam schedule on the above date and time. Please turn all cell-phones off during the Final Exam.

Homework:

You will be assigned textbook problems on each day class is held (except for exam days). You should strive to solve the problems the day they are assigned. It is very important to keep up with the homework and do the problems regularly. Although homework problems will not be graded, it is very important to do the problems to for the mastery of the subject. The best way to learn mathematics is to do mathematics.

I encourage you to work with others on homework problems. However, be sure that you understand everything and do not become dependent on others. While I will solve homework problems in class, you may feel free to stop by my office to discuss the problems. Feel free to e-mail me questions you are not able to solve, and I’ll address solutions to such problems in the next lecture.

Readings are also part of your homework, even though you cannot be directly graded on this component. Reading assignments will be given on each day class is held. You are expected to complete the reading before the start of the very next scheduled class. Please take these readings seriously; the very best way to learn mathematics is to read it.

Attendance and Late Work:

Perfect attendance is expected to succeed in the course. To obtain an excused absence due to illness for a day that class meets, you must submit written verification obtained from a physician, or the Office of Student Affairs. Excused absences will also be granted for participation in scheduled athletic events or class field trips. In that case you must notify me well in advance of the absence to be excused.

If you have an excused absence for the day an exam is scheduled, you must contact me to make arrangements for taking a make-up test (which will be different from and perhaps slightly more
difficult than the original exam). The make-up exam should be taken as soon as possible, and
definitely no later than five days after the original test was administered. Missing a test may mean
that you will lose the privilege of obtaining a written solution from me.

If you have an excused absence for the day Assignment is due, you must submit the assignment to
me within 48 hours of the time it was due. If you are still on excused absence, you must send
someone to bring the assignment to my office before the 48 hours has expired. This deadline is
strict so that I may give solutions soon after the assignment is due.

Tests and assignments missed without an excused absence will be recorded as zero points. There
will be no other chances to complete missing work, so please keep on top of things.

IMPORTANT INFORMATION:

- A grade of “I” will be given only in accordance with university policy.
- Financial Aid Statement:

  Do you have a lottery scholarship?

To retain Tennessee Education Lottery Scholarship eligibility, you must earn a
cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a cumulative TELS
GPA of 3.0 thereafter. You may qualify with a 2.75 cumulative GPA after 72 attempted
hours (and subsequent semesters), if you are enrolled full-time and maintain a semester
GPA of at least 3.0. A grade of C, D, F, or I in this class may negatively impact TELS
eligibility. Dropping a class after 14 days may also impact eligibility; if you withdraw
from this class and it results in an enrollment status of less than full time, you may lose
eligibility for your lottery scholarship. Lottery recipients are eligible to receive the
scholarship for a maximum of five years from the date of initial enrollment, or until a
bachelor degree is earned. For additional Lottery rules, please refer to your Lottery
Statement of Understanding form, review lottery requirements on the web at
http://scholarships.web.mtsu.edu/telsconteligibility.htm, or contact the Financial Aid
Office at 898-2830.

DISABILITY STATEMENT

If you have a disability that may require assistance or accommodation, or you have
questions related to any accommodations for testing, note takers, readers, etc., please
speak with me as soon as possible. Students may also contact the Office of Disabled
Students Services (898-2783) with questions about such services

NOTE:
- Syllabus subject to change with notice.
- Please turn all cell phones off during class time. If you must leave your phone on, please
  set to vibrate mode. If you must answer your phone during class, please quietly leave the
  room to do so. Please do not send text messages during class time.
- Cell phones are not allowed during exams for any reason, including using them
  as clocks or calculators.