

STAT 486/686: Computational Finance I: Market Models

Date: Spring 2009
Time: TTh 1:00 pm – 2:20 pm
Location: Duncan Hall 1075

Course Text: Thompson, James R., Williams, Edward E., and Findlay, M. Chapman (2003). *Models for Investors in Real World Markets*. Hoboken, N.J.: John Wiley & Sons.

Bernstein, P. L. (1996): "*Against the Gods - The Remarkable Story of Risk*", John Wiley & Sons, Inc., 1996, 383 pp.

Course Website: www.stat.rice.edu/~dobelman (see courses); we will also be using OWL-Space

Instructor:

Prof. James R. Thompson
thomp@stat.rice.edu
Duncan Hall 2085: 713 348 4828
Office Hours: By appointment.

Dr. John A. Dobelman
dobelman@stat.rice.edu
Duncan Hall 2098: 713 348 5681
Office Hours: By appointment.

Course Description:

Standard computational finance courses blindly use tools based on the Efficient Market Hypothesis. Extensive data analysis shows that the EMH is seriously flawed as are the tools based upon it. This is a course based on the analysis of market data without pre-conceived assumptions. Computer simulation will be utilized as a means of answering "what if?" sorts of questions. The prerequisites for this course are a good practical background in statistics and its uses and an ability to write model based computer programs (using whatever computer language the student finds appropriate).

Course Content: See <http://www.owl.net.rice.edu/~dobelman/TWF.TOC.pdf> for a listing of the text topics.

Grading: TBA

Attendance:

Students are expected to attend class. If a student misses a class, then he or she is responsible for keeping up with the course material and finding out if any homeworks, projects or exams have been assigned or scheduled.

Rice Honor Code:

All examinations are conducted under pledged conditions. Projects are expected to be worked on in groups. All group assignments should indicate the group members.

Disabilities:

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities should also contact Disability Support Services in the Ley Student Center. Further information is available at <http://dss.rice.edu/>.