

**Spring 2007**  
MATH 4380-A Mathematical Introduction to Options  
MATH 5397-Fundamentals of Option Pricing

**Professor:** Dr. Bruce Lowe

**Contact Information:**

1. Contact is by email at **lowe@math.uh.edu**
2. All email correspondence **must** originate from a University of Houston computer account and **must** have the subject heading **OnlineCourse**
3. I shall respond to email during the following periods: Mon, Tue, Wed and Thu from 12:00 p.m. to 5:00 p.m. CST.

**Course Description:** Option contracts, asset price dynamics, binomial pricing model, Ito's calculus, Black-Scholes pricing model, hedging and arbitrage.

**Prerequisites:** Math 2433, 3338.

**Course Materials:**

1. Online lecture notes at  
<http://www.math.uh.edu/~lowe/Math5397/Materials-and-Schedule/Notes/Notes.html>
2. Homework at  
<http://www.math.uh.edu/~lowe/Math5397/Materials-and-Schedule/Homework/Homework.html>

**Grading Policy:**

1. The course grade will be based on homework (100 points) and two exams (100 points each).
  - (a) Compute your total as

$$\text{Total} = \text{Homework Average} + \text{Score on Exam \#1} + \text{Score on Exam \#2}$$

(b) Your course grade will be determined as follows:

$$270 \leq \text{Total} \leq 300 = \text{A}$$

$$240 \leq \text{Total} < 270 = \text{B}$$

$$210 \leq \text{Total} < 240 = \text{C}$$

$$180 \leq \text{Total} < 210 = \text{D}$$

$$\text{Total} < 180 = \text{F}$$

2. Homework will be due according to the schedule provided at

<http://www.math.uh.edu/~lowe/Math5397/Materials-and-Schedule/Schedule/Schedule.html>

(a) Homework **must** be scanned as an **Adobe pdf file** and emailed from a University of Houston computer account to [lowe@math.uh.edu](mailto:lowe@math.uh.edu). Late homework will **not** be accepted.

(b) You shall receive homework solutions by email.

3. Exams will be given as follows:

(a) **Exam #1**

i. The exam will be posted at 1:00 p.m. CST on Saturday, February 24, 2007 at

<http://www.math.uh.edu/~lowe/Math5397/Materials-and-Schedule/Exams/Exams.html>

ii. The time allowed for the exam is 2 hours.

iii. The completed exam **must** be scanned as an **Adobe pdf file** and emailed from a University of Houston computer account to [lowe@math.uh.edu](mailto:lowe@math.uh.edu) no later than 8:00 p.m. CST on Saturday, February 24, 2007.

iv. The email subject heading **must** be **OnlineExam**

(b) **Exam #2**

i. The exam will be posted at 1:00 p.m. CST on Saturday, May 2, 2007 at

<http://www.math.uh.edu/~lowe/Math5397/Materials-and-Schedule/Exams/Exams.html>

ii. The time allowed for the exam is 2 hours.

iii. The completed exam **must** be scanned as an **Adobe pdf file** and emailed from a University of Houston computer account to [lowe@math.uh.edu](mailto:lowe@math.uh.edu) no later than 8:00 p.m. CST on Saturday, May 2, 2007.

iv. The email subject heading **must** be **OnlineExam**

### **Accommodations for Students with Disabilities**

Whenever possible and in accordance with 504/ADA guidelines, we will attempt to provide reasonable academic accommodations to students who request and require them.

<http://www.uh.edu/dos/hdbk/acad/ada.html>