

Advanced Calculus with Financial Engineering Applications

Refresher Seminar

Baruch College Financial Engineering Program

July 14 – July 22, 2014

Textbooks:

“A Primer for the Mathematics of Financial Engineering”, Second Edition, by Dan Stefanica, FE Press, 2011.

“Solutions Manual – A Primer for the Mathematics of Financial Engineering”, Second Edition, by Dan Stefanica, FE Press, 2011.

Preparation for the Refresher Seminar:

Read in advance the following sections from the Primer:

- Chapter 1: all sections
- Chapter 2: all sections
- Chapter 3: all sections
- Chapter 4: all sections
- Chapter 5: Sections 5.1, 5.3, 5.4
- Chapter 6: Sections 6.1, 6.2, 6.3, 6.8.1, 6.9
- Chapter 7: Sections 7.1, 7.3
- Chapter 8: Sections 8.1–8.6
- Chapter 9: Section 9.1
- Chapter 10: Sections 10.1–10.7

Solve the following exercises:

- Chapter 1: all exercises
- Chapter 2: Exercises 1, 3-5, 7-12, 14-19
- Chapter 3: Exercises 1-6, 8-15, 17, 19, 21, 24-29
- Chapter 4: Exercises 1, 2, 7-10, 12, 15
- Chapter 5: Exercises 1, 2, 4, 7, 8
- Chapter 6: Exercises 1-5, 7, 8, 12, 14
- Chapter 7: Exercises 1-4, 6-8, 12
- Chapter 8: Exercises 1-7, 14, 15
- Chapter 9: Exercises 1, 2
- Chapter 10: all exercises

Implement the codes from Tables 2.1–2.7, 3.1, 3.2, 5.2, 5.3, 5.6, 5.7

First Day Test: A 30 minutes closed book test will be given on the first day of the seminar. The questions will be chosen from those above. You will be allowed to bring two pages of notes, double sided.

Enjoy the seminar, and good luck!