## FACULTY OF SCIENCE



Department of Mathematics and Statistics 2500 University Drive NW Calgary, AB, Canada T2N 1N4 ucalgary.ca

## **COURSE OUTLINE**

1. Course: Amat581/Math681, Stochastic Calculus for Finance

L01: TuTh, 9:30am-10: 45am, MS 205, A. Swishchuk, Office MS552 Tel. No. (403) 220-3274, e-mail aswish@ucalgary.ca Office Hours: TuTh: 11am-12pm

Course website: http://people.ucalgary.ca/~aswish/amat581\_681F15.html

Department of Mathematics and Statistics - MS476 Telephone number - 403-220-5210

- 2. Prerequisites: (as in Calendar entry for course use the URL as well)
- **3. Grading:** The University policy on grading and related matters is described sections <u>F.1</u> and <u>F.2</u> of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Assignments (5) Final Project 50% 50% (December 8<sup>th</sup>, 2015)

"Each piece of work (assignment, laboratory report, midterm test or final examination submitted by the student will be assigned a percentage score. The student's average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade. The conversion between course percentage and letter grade is given below:

Letter Grade Conversions	
Letter Grade	% range
A+	>95
Α	88-94.5
A-	84-87.5
B+	80-83.5
В	76–79.5
В-	72-75.5
C+	68–71.5
С	64-67.5
C-	60-63.5
D+	55-59.5
D	50-54.5
F	<50

- 4. Missed Components of Term Work: The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in <u>Section 3.6</u>. It is the student's responsibility to familiarize himself/herself with these regulations. See also <u>Section E.6</u> of the University Calendar
- 5. Course Materials: Lecture notes (see course web above) and 'Stochastic Calculus for Finance' I, II, by S. Shreve, Springer, 2004. Sold in the University Bookstore.
- 6. Assignments and Projects Policy: All assignments and projects must be submitted on time, no exception, late assignments and projects will not be accepted.
- **11. OTHER IMPORTANT INFORMATION FOR STUDENTS:**

- (a) Academic Misconduct: (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under <u>Section K</u>. Student Misconduct to inform yourself of definitions, processes and penalties
- (b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.
- (c) Academic Accommodation Policy: Students with documentable disabilities are referred to the following links: <u>Calendar entry on students with disabilities</u> and <u>Student Accessibility Services</u>. MSC452 Phone: 220-8237 Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Mathematics and Statistics, Jim Stallard by email jbstall@ucalgary.ca or phone 403-220-5203
- (d) Safewalk: Campus Security will escort individuals day or night (http://www.ucalgary.ca/security/safewalk/). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also http://www.ucalgary.ca/secretariat/privacy.
- (f) Student Union Information: <u>VP Academic</u> Phone: 220-3911 Email: <u>suvpaca@ucagary.ca</u> SU Faculty Rep. Phone: 220-3913 Email: <u>sciencerep@su.ucalgary.ca</u> <u>Student Ombudsman Phone: 220-6420 Email: ombuds@ucalgary.ca</u>

(i) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

**8.** Attendance: It is important to attend all lectures, as this course makes use of earlier material in following chapters. Your in-class notes will be an easy and effective way to review the course.

9. Assignments: There will be 5 assignments (worth 50%). See assignments policy on our course web.

**10. Final Project:** The final project (worth 50%) will be based on the material given to you by your instructor. Undergrad student (enrolled in Amat 581) will review cornerstone papers in mathematical finance, and graduate students (enrolled in Math 681) will write a research project based on the material of your research interest or proposed by your instructor (see project policy and details on our course web).

**11. Use of Course Website:** The course website will be used extensively for posting announcements, assignments, solutions, grades, etc. So make sure you check the website regularly.

## 12 Important Dates:

September 8	Lectures begin
October 12	Reading Days (No class)
September 22	A #1 due
October 6	A#2 due
November 11-	Reading Days (No class)
Oct 20,Nov3,Dec	A #3,4,5 due
December 8	Projects due