



DEPARTMENT OF MATHEMATICS AND STATISTICS
COURSE OUTLINE

Course: Math 681.0/ AMAT 581 Stochastic Calculus for Finance **Dates:** September 12, 2016–December 09, 2016

Lecture	Day	Time	Location	Instructor	Office	Phone	Email	Office Hours
01	TR	9:30-10:45	MS 217	Anatoliy Swishchuk	MS 552	220-3274	aswish@ucalgary.ca	TR 12:00-1:00PM

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

Course website: http://people.ucalgary.ca/%7Easwish/amat581_681Fall2016.html

1. Prerequisites Applied Mathematics 481.

(see Section 3.5C of Faculty of Science www.ucalgary.ca/pubs/calendar/current/sc-3-5.html and Course Descriptions: www.ucalgary.ca/pubs/calendar/current/course-desc-main.html)

2. Grading: Grading: The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Assignments (5)	50 % (Sep. 27 th , Oct. 11 th , Oct. 25 th , Nov. 8 th , & Nov. 29 th)
Final Project	50 % (Dec. 8 th)

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
A	88–94.5
A-	84–87.5
B+	80–83.5
B	76–79.5
B-	72–75.5
C+	68–71.5
C	64–67.5
C-	60–63.5
D+	55–59.5
D	50–54.5
F	<50

3. 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 [Section 3.6](#). It is the student's responsibility to familiarize himself/herself with

these regulations. See also Section E.6 of the University Calendar. In the unlikely event of a health problem, the [Physician/Counsellor Statement Form](#) must be accompanied by either “[Application for Deferred Final Examinations](#)” or an “[Application for Deferment of Term Work](#)” in order to gain approval for such request. For all other missed term work such as quizzes, assignments or midterms, the [Physician/Counsellor Form](#) must be handed directly to your course instructor for approval.

4. Course Materials: Lecture notes (see course web above) *Stochastic Calculus for Finance I,II*: by Steven Shreve Springer, 2004. Sold in the University Bookstore. **Unless otherwise noted by the instructor, all D2L/course webpage materials including lecture notes, lab worksheets and solutions, will be removed from the course site on January 10, 2017.**

5. Assignments and Projects Policy: All assignments and projects must be submitted on time, no exception, late assignments and projects will not be accepted.

7. 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 [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties

(b) Assembly Points: In case of an 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: [Calendar entry on students with disabilities](#) and [Student Accessibility Services](#). Students needing an Accommodation in relation to their coursework or to fulfill 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 at jbstall@ucalgary.ca or by phone at 403-220-3953.

(d) Safewalk: Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 403-220-5333 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: VP Academic Phone: 220-3911 Email: suvpaca@ucalgary.ca.
SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca; [Student Ombudsman](#)

(g) 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.

(h) At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

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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.

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

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).

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.

Important Dates:

September 12	Lectures begin
October 10	Thanksgiving day (No Classes)
September 27	A #1 due
October 11	A#2 due
October 25	A #3 due
November 8	A #4 due
November 10-13	Reading Days (No class)
November 29	A #5
December 8	Projects due
December 9	End of Lectures