



FACULTY OF ARTS & SCIENCE
Teaching Assistant – CUPE 3902, Unit 1
September 1, 2020 - December 31, 2020

STA2503H/MMF1928HF L0101 – Applied Probability for Math Finance

This course features studies in derivative pricing theory and focuses on building basic financial theory and their applications to various derivative products. A working knowledge of probability theory, stochastic calculus, knowledge of ordinary and partial differential equations and familiarity with the basic financial instruments is assumed. The topics covered in this course include, but are not limited to: binomial pricing models; continuous time limits; the Black-Scholes model; the Greeks and hedging; European, American, Asian, barrier and other path-dependent options; short rate models and interest rate derivatives; convertible bonds; stochastic volatility and volatility derivatives; currency and commodity derivative.

Qualifications

Academic background in Statistical Sciences. PhD student (or graduate) in actuarial science, statistics or biostatistics.

Duties

Your duties will include any or all of the following: grading term tests, invigilating term tests and final exams, grading homework and/or quizzes, setting tutorial quizzes.

Instructor: Sebastian Jaimungal
Estimated Course Enrolment: 40
Meeting Schedule: **Lectures:** Wednesdays, 2pm-5pm;
Tutorials: Mondays, 4pm-6pm
Approximate Number of TA Hours: 70 hours (per position)
Approximate Number of Positions: 1
Rate of Pay: UG/SGS I/II - \$46.24/hour (+4% vacation pay)

Final availability of the position(s) is contingent upon enrolment, budgetary consideration and the determination of appointments as governed by the collective agreement.

Application Process

Application information is available at <https://www.statistics.utoronto.ca/employment-opportunities/cupe-positions-unit-1>. The deadline to submit your application is **July 17, 2020**. For more information, you may contact:

Priya Sivathason
Sidney Smith Hall, Room SS 6025
100 St. George Street
Toronto, ON M5S 3G3
E-mail: job-apps@utstat.utoronto.ca

If during the application and/or selection process you require accommodation due to a disability, please contact job-apps@utstat.utoronto.ca.

This job is posted in accordance with the CUPE 3902 Unit 1 Collective Agreement. The Departmental Hiring Policy is available in the Department office and in the CUPE Local 3902 office. The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas. **Note:** Although a graduate student's preference as to the campus location of his/her TA appointment will be taken into account, both the initial TA appointment (or CI appointment) and the subsequent appointment obligation related to that appointment may be met through position(s) on any one of the three University of Toronto campuses (UTM, UTSC or St. George) in courses in the same discipline as the initial appointment. TAs will only be assigned to courses in fields in which they are or should be qualified to assist. Duties of this position shall be performed at the campus on which the position is located. Where the duties are intended to be performed at another location, such other location will be specified in the posting.