

**ACT 245H1S 2010, Financial Principles for Actuarial Science:  
(Jan 19, 2010 version)**

<b>Lecture Section</b>	L0101	
<i>Lecture times, location</i>	T1:00-3:00 (First lect Jan 5, 2010)	UTSG-MP103
<i>Instructor</i>	Dr Keith Sharp FSA FCIA CFA <a href="mailto:sharp@utstat.utoronto.ca">sharp@utstat.utoronto.ca</a> (email is best)	UTSG-SS6007
<i>Keith Sharp's office hours Jan 5 -Mar 2010 (OK to come to hours at any campus)</i>		
	UT St George –SS6007	T 3:30 - 5:00
	UTSC-SW632	W 11:30-12:30
	UTSC-SW632	F 11:30-12:30
<i>TA Sections R2-3 (first tute Jan 14) by family name</i>		
A-K Location SS 2108	Lan Gong	<a href="mailto:gong@utstat.utoronto.ca">gong@utstat.utoronto.ca</a>
L-R Location SS2110	Panpan Wu	<a href="mailto:panpan@utstat.utoronto.ca">panpan@utstat.utoronto.ca</a>
S-Z Location MP103	Tony He	<a href="mailto:tony.he@utoronto.ca">tony.he@utoronto.ca</a>
<i>New College Stats Aid Center Jan 11-Apr1, 2010</i>	Tuesday 12-3 Alex Tuesday 3-5 Phillip Wednesday 12-3 Alex Thursday 12-3 Alex Thursday 3-5 Phillip Friday 1-5 Meng	(Priority to STA221) (STA and ACT) (Priority to STA221) (Priority to STA221) (STA and ACT) (STA and ACT)
<i>TA office hours (for all students) in SS2133 Stat Aid Centre</i>	Will be arranged before tests and final.	
<b>Approximate Coverage ACT245H1S</b>	<b>Lecture</b>	
Spot and forward rates	January 5	FM Mnl Sec 14
Duration, asset-liability matching	January 12	FM Mnl Sec 14
Stock valuation, weird instruments	January 19	
TERM TEST 1	January 26, 1:10 pm – 2:00 pm	
Derivatives, Shorts, Lease rates	January 26, 2:10 pm – 3:00 pm	McD 1, FM Mn Sec 15
Forwards and Options Term test 1 grades announced	February 2	McD 2, FM Mnl Sec 16
Insurance and collars	February 9	McD 3, FM Mnl Sec 17
Reading week UTSG/UTSC	February 15-19	
Risk Management	February 23	McD 4, FM Mnl Sec 18
TERM TEST 2 (Concentrates on material covered since Term Test 1)	March 2, 1:10 pm – 2:00 pm	
Risk Management (cont)	March 2, 2:10 pm- 3:00 pm	McDonald 4
Risk Management (cont)	March 9	McDonald 4
Financial forwards and futures	March 16	McDonald 5
Financial forwards and futures (cont)	March 23	McDonald 5
Interest rate swaps	March 30	McD 8.2, FM Mnl Sec 19
FINAL EXAM	Exam period	

### Calculator

A non-programmable financial calculator is needed at each lecture, tutorial, test and exam. “Financial” can be defined here as “Can solve  $9=a_{10}$  to get interest rate’. The Texas Instruments BA II PLUS calculator is one of the calculators allowed on the Society of Actuaries exams and on the CFA Chartered Financial Analyst exams: see [www.cfainstitute.org](http://www.cfainstitute.org); it has the financial functions that would be needed for this course and is recommended. U of T Bookstore is worth trying. If you have trouble finding it, you can buy it on the web or phone ‘bank core’ *Grand and Toy* or *Staples* stores.

## ACT 245H1S 2010S (Continued)

### Required Texts

Prof Broverman's FM manual, Fall 2008 edition or more recent, plus, from UT Bookstore: *Derivatives Markets* (Second Edition) by McDonald R.L. Chapters 1-5, 8.1-8.2, App 2A and 5B

### Participation lasers:

Please leave your participation laser in the box/bag at the end of every lecture.

### Course Objective:

This course, with ACT240, is designed to help prepare you for the Society of Actuaries FM exam (same texts, [www.soa.org](http://www.soa.org)) and the exams will copy the SoA format. You are expected to read the text ahead of the lectures. Questions and in-class discussions are encouraged. You will find it useful to sometimes read the *Wall Street Journal* (print or [www.wsj.com](http://www.wsj.com)) or *Globe and Mail Report on Business*. This course relates closely to 'real world' situations.

### Lectures

Lecture and tutorial attendance is obligatory. Lectures will not be posted on the web.

### Privacy

Photographs of all students will likely be taken in some classes and in term tests and final to aid in identification.

### Marking Scheme:

Lecture: pop quizzes	Worst two disregarded, so can miss two without penalty. Graded 7-10.	5%
Tutorials/assignments		5%
Test 1	Multiple choice	20%
Test 2	Multiple choice, concentrates on material since test 2	20%
Final	Multiple choice, on entire term	50%

If you miss more than two pop quizzes, and claim medical reasons, you will need to show medical certificates for all missed pop quizzes, including the 'giftie' first two. Weightings will not be changed, either for the whole class or (for fairness to the whole class) for any individuals. At least 40% of the marks on the tests and final exam will be from the known-in-advance pool: (assignments, pop quizzes) with small changes such as to the interest rate.

### Medical certificates not really believed:

Please do not take this course if you intend to be sick for term tests or final. Few medical certificates in this course are accepted and even fewer of them are believed. Should you miss a term test, you are required by faculty regulation to submit, within one week, appropriate documentation to the course instructor or the Departmental office: SS6018. Print on the documentation your name, student #, the course number and the date. We are skeptical about accepting medical certificates unless the doctor specifically indicates that in his/her opinion there was a disabling health problem on the day of the test. Certificates saying "Needs rest" or "injured foot" or similar will be rejected, as will certificates from chiropractors. The doctor should be contactable by us for verification. It is expected that each student with accepted documentation will be required to take a rigorous make-up test at a chalkboard. If documentation is not provided or is not accepted, your test mark for the missed test will be zero.

### Web Site

The timing of lecture coverage will likely deviate from the day-to-day schedule above. This outline and updates are at <http://www.utstat.utoronto.ca/sharp>. Assignments and other info are posted on the course Blackboard password-accessed portal – you will wish to monitor the portal every few days. Also please ensure that the portal 'knows' an email address for you which you monitor frequently, otherwise you'll miss course-related emails.

### GOOD LUCK