

ACTSCI Club

your source for all things actuarial

no. 2 | March 2017



Club Event Round Up//Useful Information//Contact Info.

Table of Contents

Event Round-up 1

Events:

VBA/Excel Tutorial 2

Manulife Networking 3

Desjardins Trivia Night 4

Articles:

Hedging 5

FM/MFE 6

CAS/SOA 7

Final Thoughts End

Recent Events:

02-14 Excel Tutorial

02-16 VBA Tutorial

03-02 Manulife Networking Event

03-07 Coffee Connection

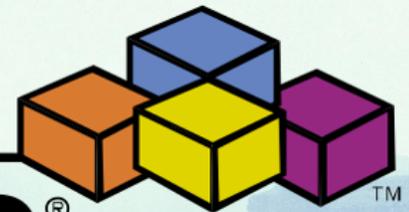
03-21 Desjardins Trivia Night

Upcoming:

03-31 E.O.T (End of Term)



Microsoft®



Visual Basic®

for Applications

VBA AND EXCEL TUTORIAL

Being proficient in Excel and VBA is crucial for any aspiring actuary. Employers are always on the hunt for these skills when looking on your resume. At our tutorials, members of all levels were able to learn and hone their Excel and VBA skills

MANULIFE NETWORKING EVENT

Members were invited to interact with Manulife representatives from the KW Region. They were able to have conversations with recruiters and people who worked in different departments.



Desjardins Trivia Night



Desjardins was kind enough to send representatives to run a trivia night.

Members were provided with pizza and prizes! This was one of our most popular events. Special thanks to Desjardins for such a great event!





WHAT IS HEDGING?

By now in your academic career, you've most likely heard the word "hedge" or "hedging" uttered by one of your more financially savvy friends. Or perhaps you've seen *The Big Short*. But what is hedging? And what does it have to do with being an actuary?

Now, hedging has nothing to do with trimming bushes, or the ragged row of shrubbery that separates the houses in your grandparent's neighborhood, but it is a good image to start with. The main goal of these hedges, other than offering limited aesthetic appeal, is to surround the yard and create a boundary. They are supposed to keep what belongs in the yard in and any potential intruders out.

Similarly, hedging in business or finance refers to the bounding of risk. Think of a troublesome French bulldog that is eager to mark its territory. To keep the dog in check, one can construct a hedge to reduce the destruction caused by the dog. Businesses take this approach when it comes to efficiently maximizing profit. One way to do this, in contrast to simply boosting earnings, is to minimize loss or keep the dog in the yard.

There is no single specific way to "hedge" per se. There are multiple methods with varying degrees of effort required. Let's say you run a lemonade stand and you have suppliers for the lemons and the sugar. Your profits depend on how much you will sell the lemonade for and the cost of your supplies. Suppose the market for lemons is volatile. A rise in the price could drastically affect your profit. To "hedge" this loss, you could enter into a contract with the supplier to lock in a price for a set period. This way, regardless of the fluctuations in the lemon market, your cost of production is fixed.

As an actuary, risk management is your life. Your workplace is depending on you to address company needs and to ensure they are met with minimal loss. A specific example would be Manulife's "Seg Fund" (segregated fund) which is a variable annuity. This product guarantees a certain value of the initial investment at maturity. If the market were to drop, it is the responsibility of the actuarial team to "hedge" against this; ie. betting AGAINST the market to achieve net balance. If the company is called upon to fulfill an obligation, it must be certain that the debt can be offset by an increase in asset

CHANGES TO FM/MFE

The SOA (Society of Actuaries) has announced the following changes to the FM and MFE exam syllabi:

FM:

Comparing the Syllabi from February 2017 and June 2017 test dates: The weight of interest theory on the exam has been increased in the June 2017 syllabus and the Financial Economics section has been replaced with required knowledge of Interest Rate Swaps and Determinants of Interest Rates. The format of the exam remains the same. According to the SOA website, "all derivatives material will be moved to Exam MFE."

MFE:

The syllabi for March and July 2017 are vastly different in format, thus comparing them doesn't offer much insight in the changes. The SOA website states that they plan to, "Remove some of the more mathematically sophisticated topics from Exam MFE, in particularly those related to stochastic calculus. It is more appropriate for those topics to be covered in fellowship exams as needed for each track."

Those interested in specific changes are encouraged to refer to:
[New MFE Syllabus in Summer 2017 – Actuarial Outpost]
(http://www.actuarialoutpost.com/actuarial_discussion_forum/showthread.php?t=308882)

According to this post the following topics are removed:

- Intro To Risk Management
- Swaps
- Brownian Motion and Ito's Lemma
- The Black-Scholes Merton Equation
- Volatility

Note that although changes to both exam include a significant reduction in the range of content covered, there is no insight as to the new difficulties of the questions on the topics that are retained.





FORK IN THE ROAD

CAS/SOA

On the road to becoming a full-fledged actuary, there is a fork that everyone will come across. You must either opt to follow the CAS (Casualty Actuarial Society) path or the SOA (Society of Actuaries) path. Both require a series of exams and additional online education. Keep in mind that the CAS does not actually administer the P, FM, MFE, or C so all aspiring actuaries must take these through the SOA and will receive credits from the CAS. The CAS does, however, require and administer Exam LC and Exam ST to complete their preliminary exam requirements, while the SOA only requires their MLC in addition to the preliminary exams listed above.

The fundamental difference between the two entities are the types of insurance or products each deals with. CAS members specialize in P&C (property and casualty) insurance, while the SOA primarily focuses on life insurance, health insurance, pensions and other similar fields. In terms of difficulty, P&C products are often short-term and volatile. Additionally, these products can be made to cater to smaller markets, like pet insurance or sports/blackout insurance. This tends to encourage the belief that P&C jobs are more mathematically challenging than SOA type jobs, like life insurance and pensions. For actuaries working in P&C, money is made through low-risk signings (more people buying products = more money), whereas actuaries working in other fields make money, according to Dale Porfilio, FCAS, by “holding the policyholder's money and investing it well”.

“But which is the best path for me?”

The “best” path is completely up to the individual, and students are encouraged to look for internships in both disciplines. It is also important that being a member of CAS or SOA does not bottleneck your ability to try working in different roles. So, if you can, try both and choose the one that you enjoy the most. Both offer a vast world of opportunity and can be very rewarding.

Final Thoughts

End of Term Event -TBD

Come celebrate the end of another school term! Keep your eyes posted for the event date

Contact Us!

LinkedIn:

[linkedin.com/company/university-of-waterloo-actuarial-science-club](https://www.linkedin.com/company/university-of-waterloo-actuarial-science-club)

Gmail:

asclub.uwaterloo@gmail.com

Facebook:

www.facebook.com/groups/92787605456/

Sources for articles:

(<http://www.theactuary.com/archive/old-articles/part-6/hedging-for-life-insurers/>)

(<http://www.investopedia.com/articles/basics/03/080103.asp>)

soa.org

http://www.actuarialoutpost.com/actuarial_discussion_forum/showthread.php?t=308882

(<https://www.soa.org/Library/Newsletters/The-Future-Actuary/2000/December/Jul-2000-winter-choice.aspx>)