



The UMACtuary

January 2013

In this issue of The
UMACtuary:

Important Dates

Grad Dinner Announcement

UMAC Executive Elections

Past Events: ASNA and UMAC Winter Party

Upcoming Events

Message from the Promotions Coordinator

Message from the 3rd Year Rep

Cathy Duong: My Internship Experience

Chess Corner

Poker Room

Some
Important
Dates

February 8 – UMAC bowling

February 11-15 (*sometime during the week*) – Warren Center Speaker event. More details to come!

March 1 - Executive candidate platforms due

March 4 - Executive candidates released / start of campaigning

March 8 - UMAC Poker Tournament

March 14 - Executive elections

March 28 - Annual UMAC Karaoke event at Limelight



Grad Dinner Announcement

Anyone who is graduating this year - after winter term, after summer term or after fall terms of 2013 - you are invited to attend the UMAC Annual Grad Dinner. The dinner will take place near the end of April. Stay tuned for more details!

UMAC Executive Elections

Who are the UMAC executive?

Every year, UMAC is run by a group of 8 dedicated individuals who work together to put on all the events throughout the year, keep track of finances, maintain the UMAC website, produce the UMAC Newsletter, run the Mentorship program and Manual Exchange program, coordinate high school presentations and many other tasks. The executive members are elected via voting by the membership body. **Becoming an executive member is a great opportunity to become involved in your university career**, looks great on your resume, is a fantastic networking tool, and is a lot of fun, (seriously it is - ask any of this year's executive about how much fun they have had this year!)

What happens next?

The beginning of the election process began with a UMAC Town Hall evening on January 31st @ 5:30pm in Room 117 of the Drake Center. This year's UMAC executive discussed their positions as stated in the UMAC Constitution as well as provided details on what their roles have entailed this year as well as answering questions. If you missed the Town Hall event, get in touch with an executive member to get an idea of what being on the executive involves and to gauge your interest in the variety of positions available; positions are open to students in any year of the program.

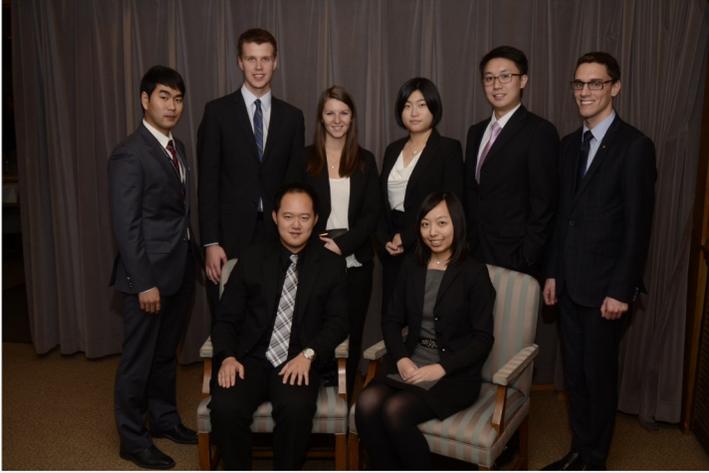
I am thinking about running for an executive position, what should I know?

- 1) Anyone can run for any position. You do not need to have taken any specific classes or passed actuarial exams, nor do you need to be part of a specific faculty.
- 2) Only UMAC members can vote.
- 3) Current executive members DO NOT have a guaranteed position next year. They must run a campaign the same way as everyone else.
- 4) Presidents may run as a team of 2. For all other positions, candidates must run alone.

What executive positions are available?

President, Treasurer, Secretary, ASNA Representative, Promotions Coordinator, Third Year Representative and Communications Chair. This year we have two Co-Presidents to share the workload. To learn more about these positions, please consider talking to an executive member. Remember, the elections take place on March 14th.

ASNA 2013: What a Weekend!



For those of you that attended ASNA this year, I hope you had an amazing time! With over 60 students from the University of Manitoba in attendance, we helped make this year's ASNA Convention an extremely successful event! From the mingling party to the bar night, from the career fair to karaoke (where there was a breathtaking performance of Shania Twain's "Man! I Feel Like a Woman" by two UMAC members!), there was something that everyone can remember from this year's event!

I want to give special mention to the case competition finalists from our University: Aaron Yanofsky, Richard Gould, Stefan Baluta & Julia Gudmundson. You were

selected to be in the finals of the first ASNA Case Competition, which is an achievement in itself, and you gave us a great presentation of your work! Thank you!

I cannot speak about the success of the ASNA Convention if I do not mention the Convention Committee. They are: Martin, Steven, Kathryn, Sarah, Jun, Ray & Rosena. These are the people who worked endlessly for 10 months contacting sponsors, selecting venues, and planning the whole convention that you attended! Make sure if you see any of them in the hallways or in your classes, that you thank them for all of their efforts! I am sure I speak for many of you when I say that I am truly grateful for all that they did! Their hard work certainly paid off.



Finally, thank you all for attending the convention this year, and I hope you had a lot of great memories and valuable experiences that will help you appreciate becoming an actuary!



UMAC Winter Party

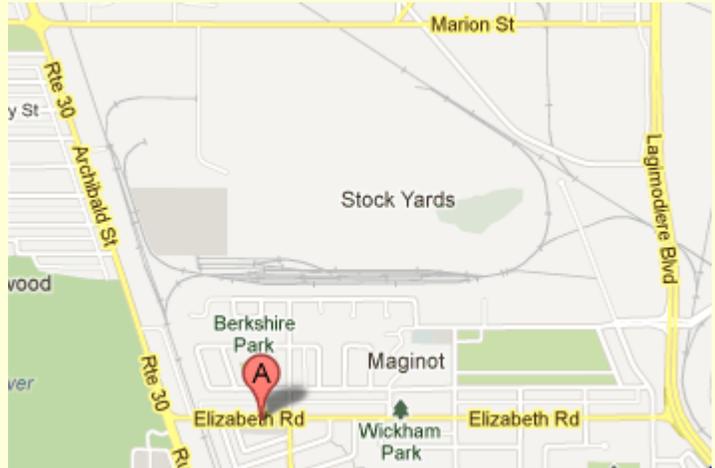
This year, we went to Adrenaline Adventures for snow tubing. Despite the cold and the drive, we had a great turn out! Between pushing a bunch of tables together in the restaurant, the card games, forming chains of people going down the hill, and getting in snow ball fights riding up the hill... It was an awesome night that brought the group together. Thanks to everyone who bundled up and made it a success!

Upcoming Events

UMAC Bowling Night

UMAC Bowling Night is an annual event designed purely for fun! Come on out to Windsor Bowling Lanes (678 Elizabeth Road) on Friday, February 8th and test your bowling skills against the best UMAC has to offer. The event will run from 5:00pm – 8:00 pm and is completely free for any UMAC members who have signed up for the event! To sign up, contact Twyla:

twylamn@gmail.com



Karaoke at Limelight

If you attended ASNA this year, then you may already know about the secret vocal talents of young actuaries today. If not, then you have a lot to see! To make sure we all have the chance to debut our talents, UMAC is once again hosting Karaoke Night at Limelight. The night is an excellent chance to cut loose and socialize with fellow students in a different environment.



UMAC Poker Tournament

Once again we will be hosting an annual poker tournament. This event is a great chance to mingle with the fellow students and maybe even win some money! If you don't want to play, no problem! There will be other games available and plenty of fun to be had. The event is on March 8th and the time and location will be announced soon, so keep your eyes open.



A message from the Promotions Coordinator



We are continuing to go into high schools this semester to promote the university of Manitoba's actuarial program. We are looking for volunteers to go into classrooms alongside an industry actuary to present. The slides will be provided as well as any preparation training or questions you may have. This is an excellent opportunity to meet and work alongside a professional actuary, as well as gain some volunteer experience and public speaking skills. In addition, we like to send alumni where possible so you may see some familiar faces from your old high school! For more information on how to become a volunteer, or for any questions you have, contact Julia:

juliagudmundson@hotmail.com

A message from the Third Year Rep



Welcome back everyone! To those in Interest Theory, I hope that the first test went well. Remember to come out to the Interest Theory study sessions, they can be a big help when it comes to preparing for the exams. Thank you to the volunteers who helped out with the session on Thursday January 24th!

For new mentees, use your mentors! They are there for you to help you with every question and concern you may have. If your mentor has not contacted you, please contact me. To all of the mentors who agreed to take on an additional mentee for the winter term, the mentorship program is built on the dedication of volunteers like you, thank you so much for continuing to give back to our community.

The UMAC Bowling Event is an excellent way to meet your mentees / mentors in a relaxed setting so contact Twyla and get yourselves signed up! As always, you can contact me anytime with any questions.

dsenensky769@hotmail.com

A message from Student Life

If you're looking for like a great opportunity to get involved on campus, come out and volunteer for U of M orientation 2013. The dates are September 3rd and 4th, with one day of training in late August. This is an excellent opportunity to meet new people, gain valuable presentation experience as well as volunteer experience which can go on your co-curricular record. As a bonus, you will receive a snazzy gold t-shirt and free lunch on training day and both orientation days! We are looking for a wide variety of skills in addition to presenters so public speaking is not mandatory for volunteers.

If you are interested in volunteering or finding out more information, visit the student life website at the website below. The absolute deadline for applications is February 25th so don't doddle! <http://umanitoba.ca/student/studentlife/getinvolved/index.html>

My Internship Experience

By Cathy Duong

Manulife Campus Ambassador

For Winter 2013



Last summer I had the opportunity to complete a sixteen week internship at Manulife Financial in Kitchener-Waterloo, Ontario. I was part of the Canadian Asset Liability Method (CALM) team in the Valuation department. The CALM department determines the actuarial liability by using a cash-flow valuation method to approximate and book the quarterly reserve. My main responsibility was to quantify the dollar impact on reserves, as a result of changes in economic assumptions. I learned to use an actuarial modeling software called GGY Axis and I also used MS Excel regularly to analyze and present my results to my manager. It was really interesting work and I was able to develop my technical, teamwork and communication skills.

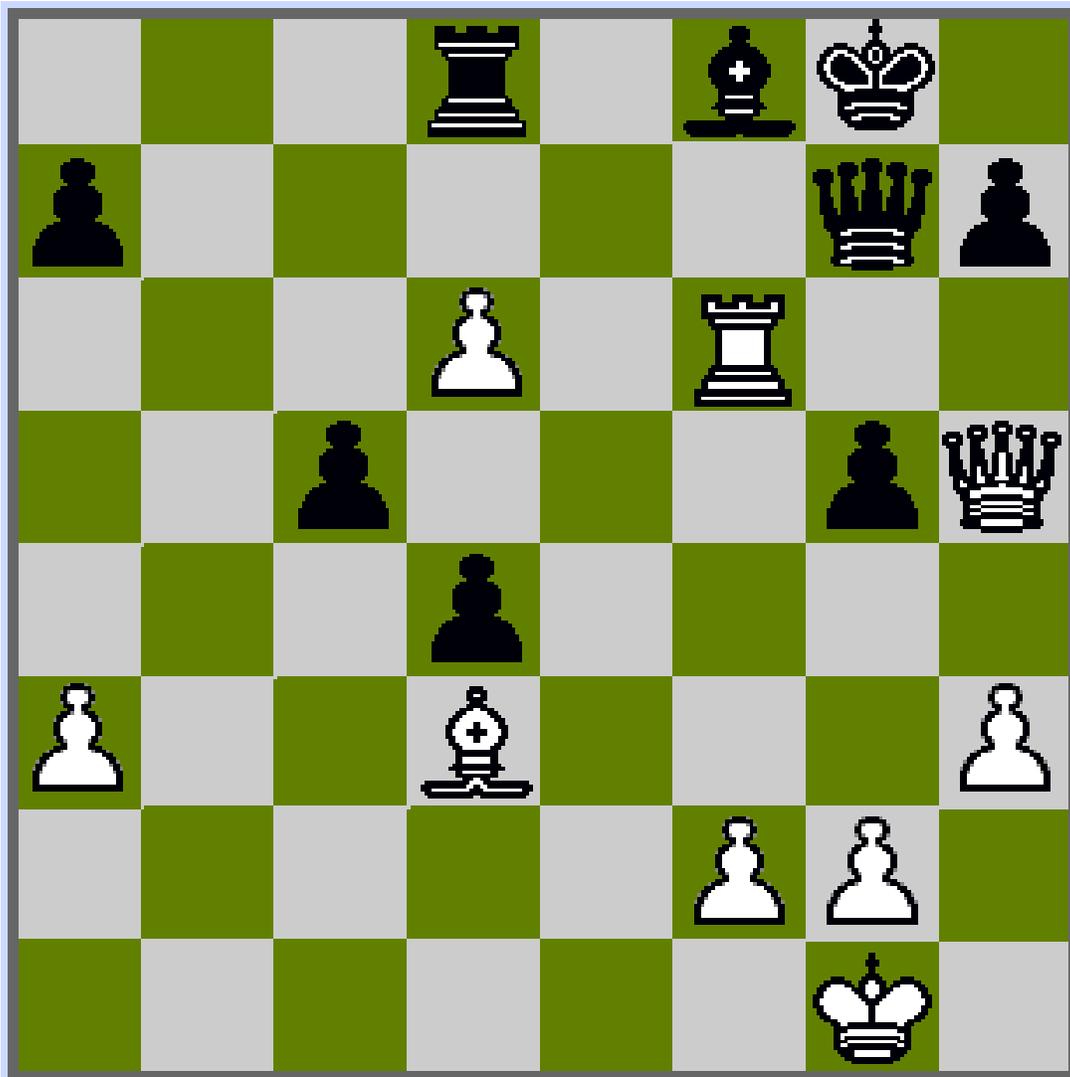
Manulife recruits students across Canada for their internship program, and there was about sixteen students working in the summer. This made it really easy to meet people and make friends. Also, each intern was paired up with Actuarial Development Program Member to meet up with every month to talk. This was a great resource for questions or advice.

Manulife does a really good job of providing many learning and networking opportunities. The interns were encouraged to attend the financial quarterly meeting, lunch and learn sessions and webinars. There was a Co-op project that grouped actuarial and finance students together to research a topic and present to an audience made up of actuaries. On Job Shadow Day, interns were paired together and spent half the day learning about each other's position. This was a great experience that broadened my exposure to different actuarial roles. And apart from work, the Manulife actuarial community organizes many fun events such as a passer's night, a joint BBQ with the Toronto office, dodge ball games and laser tag!

Overall, I had a great experience interning at Manulife. The work environment is positive and the actuarial community is very welcoming and supportive. K-W was a great place to spend the summer and I made some great friends. I developed my skills, learned more about the actuarial profession and was able to network with industry professionals. It was such a rewarding experience and I definitely recommend Manulife's internship program!

Chess Corner

Welcome to the Chess Corner! Here, we will post one or more puzzles so you can test those analytical problem solving skills. If you have a solution, email michaeletkin@shaw.ca and you may get recognized in the next issue of UMACtuary. Good luck!



In this position material is even. White has launched a strong attack forcing black onto the defensive. But, black's defense is still strong enough to prevent an immediate checkmate. Can you find a set of moves where white will win enough material to guarantee a win?
White to move

Bacrot vs Lothar Vogt, Arosa, 1996

Puzzle provided by: <http://diamondbackchess.blogspot.ca/2009/01/more-chess-puzzles-white-to-move-and.html>

The Poker Room

Check out the Poker Room for some interesting Texas Hold Em strategy as well as updates on potential poker games in and around the university!

This weeks lesson: Playing draws and calculating outs.

Poker is about finding and utilizing your strengths. As actuaries, we have strength in probability. In this lesson, we will talk about how to use that math to our advantage and avoid making costly mistakes.

Two strong poker hands are a straight, and a flush. Each of these hands requires exactly 5 cards to be of value. 4 of the cards is worthless. We often have a situation where we have 4 of the 5 cards we need to make a straight or flush, we call this a draw. This is where people tend to make very expensive mistakes. We will use math to avoid those mistakes.

Straights: There are 3 kinds of straight draws. Inside straight draw, outside straight draw and double straight draw. Let's look at each in turn.

Inside straight draw: One card will make our straight. Ex: 4578. Only a 6 will help us here. It is named because we need to hit a card that is 'inside' (in between) the cards we already have

Outside straight draw: Two cards will make our straight. Ex: 6789. Here, either a 5 or a 10 will make a straight. It is named because we need to hit a card 'outside' (on either end) of the cards we already have.

Double straight draw: Ex: 35679. We can hit a 4 or an 8 for a straight. (These can be tricky to see).

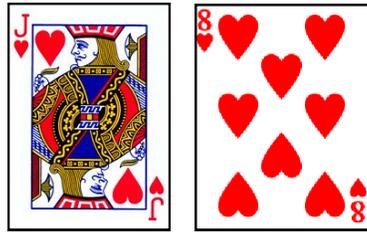
Flushes: There is only one kind of flush draw. When we already have 4 of a suit and are looking for a 5th.

Many players simply hope they will get lucky and get the cards they are looking for. Instead, we are going to get into the habit of calculating the probability of making our hands and using that information to make decisions.

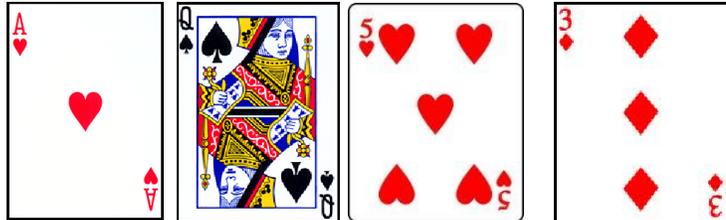
Consider the following bet. I place 5 cups facedown with a \$5 under one of them. If you guess correctly, the money is yours, but it costs \$2 to play. Do you? In this case, you know you will win 20% of the time but you are risking \$2 to win \$5. The expected value of this play is $80\% \times (\$0 - \$2) + 20\% \times (\$5 - \$2) = -\$1$. How often would you need to win for this to be a breakeven play? $Y\% \times (\$0 - \$2) + (1 - Y\%) \times (\$5 - \$2)$. $Y = 40\%$. We call these types of calculations, expected value calculations (EV). In poker, with draws, we often have the same situation and we are looking to only play in situations where $EV > 0$. Otherwise, we should fold. Note: Folding is, by definition, $EV = 0$.

In the following examples, first calculate the probability of you winning, then use that to calculate the expected value of calling.

Our Hand



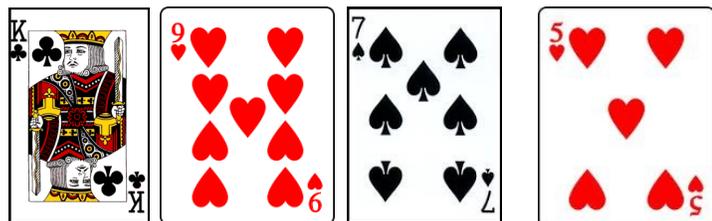
Example 1



Question: There is \$10 in the pot and then our opponent moves all in for \$5. We believe that to win the hand, we will need to make a flush. We also believe our opponent does not have a flush draw. Do we call?

Solution: If we call, we are rising \$5 to win \$20 (\$10 in the pot + \$5 bet + \$5 call if we make it), so we need to be winning at least $\$5/\$20 = 25\%$ of the time. Are we? There are 9 remaining hearts (13 hearts - 4 accounted for) and 46 cards remaining in the deck (52-6). Therefore our chance of making a flush is $(9/46) = 19.565\% < 25\%$. Therefore we should fold.

Example 2



Question: There is \$60 in the pot and then our opponent moves all in for \$45. We believe that to win the hand, we will need to make a straight of a flush. We also believe our opponent does not have a flush draw or straight draw. Do we call?

Solution: If we call, we are rising \$45 to win \$150 (\$60 in the pot + \$45 bet + \$45 call if we make it), so we need to be winning at least $\$45/\$150 = 30\%$ of the time. Are we? We can make a straight with 8 cards, (4 6's + 4 10's). Also, there are 9 remaining hearts with which we can make a flush. So we need one of 17 cards right? **WRONG! WARNING:** We counted the 6 of hearts and the 10 of hearts twice, so we actually have $17 - 2 = 15$ cards that can help us. Again, there are 46 cards remaining in the deck, (Therefore our chance of winning is $(15/46) = 32.609\% > 30\%$. Therefore we should call.

Make sure to watch for the upcoming UMAC poker game! Details are on their way. Also, to see an amazing poker hand, check out this clip from *Poker After Dark*. <https://www.youtube.com/watch?v=mTzp2J5KJMA>