



THE AKTUA TIMES

2011 – EDITION 1



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A skydiver is blown off-course and lands in a tree in a remote area. After dangling from branches for an hour, he spots a hiker walking by. "Excuse me," yells the parachutist, "but could you tell me where I am?" The hiker looks up and says, "Yes, you're twenty feet above the ground." "Thank you," replies the skydiver, "You must be an actuary."

"What makes you say that?" asked the hiker. The skydiver answered, "Because what you just told me was 100% accurate, but totally worthless!"



Facebook and website

Be sure to keep an eye on our website [www.aktua.up.ac.za] and our Facebook group for the latest information regarding events organised by Aktua.

LETTER FROM THE EDITOR

Dear Reader

The year 2011 is approaching the half way mark at a rapid pace. Exams are on the distant horizon, but as life goes for an Actuarial Science student, there are just a 'few' more class tests, semester tests, assignments, practicals etc. to get through before the fun really begins.

I would like to start off by welcoming and congratulating the new additions to Aktua's committee namely Jo-Anne McAlister, Albert Mijburgh and Jocelyn Mpanya. My experience is that being a part of Aktua is one that will be cherished forever. I trust that each one of you will strive to achieve the best for Aktua.

The first semester for the year 2011 has begun in true Aktua style filled with events. I suggest that you keep your eyes and ears peeled in order to ensure that you do not miss out on the excitement and fervour.

We kicked off the semester during 1st year orientation where the first year actuarial science students were given the task of playing Cluedo (solving a murder mystery) so that they could familiarise themselves with campus, its environment and their new peers. An evening when students could come and utilise their general knowledge skills was at a Quiz evening held at Just Cuban. Furthermore, a Poker evening was held for all students who long to be in Vegas. Students were invited to put their probability skills to test whilst enjoying the ambiance and company of their competitors while playing strategic, fun rounds of poker.

On the academic front, a very successful career expo was presented by ASABA. Please note that the month of May will be filled with more career enhancing exposure evenings and opportunities. Be on the lookout for these events.

Aktua has also enjoyed a Volleyball day. Everything was perfect: weather, company, drinks.... the only thing missing was the ocean and its waves. Thank you to all players (and for those who tried) for defeating the cliché regarding actuaries and sport.

As a result, Aktua has begun this year in a high spirited manner and will continue with our efforts throughout the year. Good luck to one and all in the preparation for the June examinations and may you all have a well rested vacation.



Bhaavik Chhana

(Editor)



An actuary is walking down the corridor when he feels a twinge in his chest. Immediately, he runs to the stairwell and hurls himself down. His friend, visiting him in the hospital, asks why he did that. The actuary replies, "The chances of having a heart attack and falling down the stairs are much lower than the chances of having a heart attack only."

A COMPENDIUM OF QUAKES

Adapted from: "Japan Earthquake: Insurance Industry Impact and Risk Management Lessons" by Towers Watson and "FactBox - Insurance impact of Japanese earthquake" by Reuters.

On March 11 at 2:46 p.m., a magnitude 9.0 earthquake struck an area 370 kilometers northeast of Tokyo. The offshore quake, the fifth largest worldwide since records began, spawned tsunamis that eventually reached the entire Pacific Rim. Within an hour of the earthquake, a wall of water up to 15 meters (50 feet) high hit the Japanese coast, sweeping away towns and villages in its path.

The disaster is not yet over. Four nuclear power facilities (of 17 in Japan) were damaged by the earthquake and tsunami, and were shut down. The Fukushima Daiichi facility reported explosions at three of the reactors and, as of this writing, efforts continue to reestablish cooling systems and control the threat of radiation leaks.

The terrible human cost and the financial impact of the devastating earthquake and tsunami that hit Japan are still being assessed, with further concerns raised over Fukushima and other nuclear facilities prompted by reports of a powerful new magnitude 7.1 aftershock on April 7. But it appears that, while economic losses are substantial and are expected to rise further, insurers' exposure will be limited. Towers Watson estimates that total insured losses from the disaster will be between US\$20 billion and US\$45 billion.

This estimate includes damages to residential and commercial properties (including business interruption), marine, auto and life, but is exclusive of nuclear losses. Any potential liabilities associated with the nuclear exposure from the event are not significantly insured by the private market and have not been included in the assessment.



Insurers' exposure will be limited because of the way that risk mitigation is structured in Japan:

- 1 Residential earthquake coverage take-up rates are low, limiting insurers' exposure to this risk.
- 2 Residential property losses are shared in an arrangement that incorporates risk taking by insurers, a pooling vehicle on behalf of insurers, and the Japanese government.
- 3 Commercial property is largely covered by local insurers offering selected large corporations coverage through an ordinary fire policy.

Life insurance claims are handled in a straightforward way. An exception being made in this case will allow families of victims to collect an accidental death benefit rider in addition to the death benefit. The terms of the rider exclude death resulting from an earthquake, but the life insurance industry has waived that stipulation.

The extent of the ultimate costs will have to incorporate uncertainties associated with liability for time element coverages such as business interruption losses. What is fairly certain is that because Japan has retained most of the risk rather than turn to the international reinsurance market, the disaster is unlikely to result in global price hardening.

Japan's localized risk retention framework would benefit from a reassessment. Looking ahead, Japan and its insurance market may want to explore ways of spreading more of the risk internationally, as countries in the Pacific Rim such as New Zealand have done.

The world's leading insurers and reinsurers have issued initial estimates of how much the earthquake will cost them, and more are expected do so over the next few weeks.

Company Loss Estimates			
Munich Re	€1.5 billion	Hiscox	\$100 million
Swiss Re	\$1.2 billion	Amlin	£120 million
Hannover Re	€250 million	Hardy	£10.5 million
Scor	€185 million	Validus	\$139 million
Chartis	\$700 million	Montpelier Re	\$126 million
ACE	\$225 million	Novae	\$35 million
Flagstone Re	\$100 million	Transatlantic	\$240 million

Risk modeling agency Eqecat has estimated the total insured loss will be \$12 billion to \$25 billion, while rival AIR Worldwide said the industry could face a bill of \$20 billion to \$30 billion.

Jean Francois Greff

ACADEMIC EVENTS

Career Evening

Our very first Career Evening for 2011 took place on the 3rd of March and was organised by ASABA. The evening was a great success with over 100 students attending, four guest speakers as well as a snack and networking session afterwards.

The first address was by Mandla Mahlangu, an ASABA Mentorship Committee Member. He gave us a brief overview of the Mentorship Programme offered by ASABA to actuarial students at UP, Wits and UCT. The programme consists of one-on-one mentoring where the student gets assigned to a qualified professional actuary who then becomes their mentor, as well as mentorship sessions at universities. The one-on-one mentoring is a great opportunity for students to build a friendship with their mentor and to seek professional advice regarding their future careers. They pose as a guide to the student in the corporate world and students develop valuable skills that are necessary to develop into an effective individual. ASABA hopes to increase the number of mentors in Pretoria in the near future to allow for more students to be accommodated.

The second speaker was Veronica Ntshalintshali, an HR representative from ABSA. She spoke about the working world, how to conduct yourself with professionals in the work place and about the importance of working hard during our university years to secure ourselves in the future. She emphasized accepting responsibility in the relationship with your mentor, always being well-prepared with questions and making the required effort in arranging meetings.

The third address was the sponsor address made by Felix Kagura, an Actuary from Liberty Life. He spoke briefly about Liberty Life's involvement with ASABA, a bit on Liberty Life as a company and about his personal experiences in qualifying as an actuary.

The final speaker was definitely the highlight of the entire evening. The guest speaker, Namir Waisberg, focused mainly on alternative actuarial careers which are growing in demand in the financial world.



Namir began trading on the stock market at the age of 12 and by 21 he graduated with a double honours degree in Actuarial Science and Mathematics of Finance and, to top it all, he was also a fully qualified actuary by then. He has a number of businesses which include a private commercial property fund, a finance recruitment firm and a financial services business. He also holds a CFA Charter and serves as a director of CFA South Africa. He is a member on the JSE Index Committee, the Bond Exchange Index Committee and chairs the Actuarial Society's Investment Committee.

The specialist fields that are recently and urgently requiring actuarial skills are Quantitative Analytics, Sales & Structuring and Quantitative Trading. Namir compared and contrasted working conditions and packages to traditional actuarial jobs. This was certainly an eye-opener when we saw the difference in salaries and bonuses! He emphasized on the amount of dedication, pressure and hours required to pursue these paths as well as the high academic requirements needed to be considered for the job. He also provided career guidance on further studying, which includes doing Honours, CFA, FRM, Financial Engineering and Masters qualifications all of which are excellent options to consider.

His presentation was certainly inspirational and proved that even the nearly impossible can be done with the right attitude towards your career.

Overall, the evening was interesting, fascinating and motivating. It definitely had us all pondering about our future opportunities and the exciting times that lay ahead! We hope to see you all at AKTUA's future Career Expo as well as ASABA's Sessions.

Hetal Kalan

Aktua has been working closely on a new project where we want students to interact with various companies and experience the 'working world'. We want to provide a sneak peek to students into the lives of qualified as well as junior actuaries.

We got the ball rolling during December 2010. Two of the department's students namely Fuxun Xia and Bhaavic Chhana were accommodated at the Financial Services Board where they experienced the working environment and were allowed to interact with the actuaries.

Only positive feedback was received from the two students as to how enjoyable and eye-opening this experience was.

As a result, Aktua will be providing students (specifically final year students) the opportunity to apply and participate in this initiative. Keep visiting the Aktua facebook page for more information.



Financial Services Board



SPORTING EVENT

“Beach” Volleyball day 2011

On the sunny Saturday morning of 26 February 2011, an energetic group of Actuarial students met at LC De Villiers sports grounds to prove the following two-part theorem: **1a.** ‘You can play beach volleyball without a beach’ and **1b.** ‘You can look really good doing it’.

Given plenty of free Energade to go around, sunblock, a beach volleyball court and enthusiastic actuaries-in-the-making, I think we could dub this proof as rather ‘trivial’... but definitely worth it!

So, nevertheless, the proof was taken head on in Aktua’s beach volleyball tournament. The level of play from both the guys and the girls was impressive to say the least. With all the diving and air-born volleys played, it can surely be said that there was plenty of actuarial-acrobatics on display.

The eventual winners were from team ‘Vanilla Choc Chip Cookies’ and they deservedly were awarded a gift-hamper and the Aktua trophy.

If you enjoy sport, or are just looking for a bit of a tan and a fun-filled morning with your peers, we look forward to seeing you at our future sports days.

Lawrence De Jesus



Aktua Beach

Team Number	Team Name
1	Dynamite Dynamos
2	Vanilla and choc chip cookies
3	A-Team (X)
4	Scorgasms
5	Italia

7min per side
3min half-time



LECTURER INTERVIEW



Full name?

Samantha Pretorius

Date of birth?

15 February

Where did you grow up and where did you attend school?

I grew up all over South Africa and spent 2 years in Namibia but attended school in Pretoria. I spent all of high school at Crawford College Pretoria.

Interview

If you have to do university all over again, would you still choose Actuarial Science? Why/Why not?

Definitely. It's hard work but I have never been afraid of a challenge. To be honest, I didn't have a very good idea of what actuaries were when I started studying – I think most students don't – but the fact that not very many people could do this inspired me. In the end the actuarial career seems to suit my personality quite well.

Why did you decide to continue with your Master's degree and would you recommend it?

I decided to continue with my studies around the end of my Honours year. I had some opportunities to go into the professional world and I didn't think I was quite finished studying. There are so few actuarial researchers worldwide that once again I suppose I was choosing a path that was less travelled.

What are you doing your Master's degree on and why?

I am conducting research into reducing the uncertainty of earthquake risk parameters and applying these improved estimates to problems in the reinsurance industry. I am working with the AON Benfield Natural Hazard Centre on campus, which is run by Professor Kijko, my supervisor. He is the foremost earthquake hazard expert pretty much anywhere, so that's where the earthquake connection comes from. I have learnt more about earthquakes and natural disasters than I ever thought I would. The reinsurance part comes from my passion in the actuarial profession. I have always been more interested in the aspects of reinsurance and general (or short-term) insurance than anything else. Of course all of what we learn when training to become actuaries can be applied to the different specialisation areas.

What was your favourite activity or hobby during your Honours degree?

I am a big believer in retail therapy. Believe me, without some kind of therapy, any of our Honours students will be close to a nervous breakdown by the time the June exams roll in. The size of my shoe collection speaks volumes about how much "therapy" I needed. And still do!

Do you enjoy being a lecturer and what is the most fun thing about it?

I do enjoy lecturing and my research (which is part and parcel of being a lecturer). The most rewarding part is dealing with students and noticing that you have made a visible difference to their lives, or at the very least their attitude to their studies. The most fun thing would definitely be the vacation leave, just kidding! I love how I get to meet all these experts in different fields by working at the University. It's definitely a lot more interesting than working at a large actuarial employer. You get to know people from every part of the world. It's quite something.

What annoys you the most about lecturing?

When students don't put in the effort that is required of them. Someone is paying for them to gain an education, and it's sad when people don't really understand what opportunities they are being afforded.

What phrases do you use the most during lectures?

I'm not really sure, never thought about this one. I mainly try to make sure that everyone understands what is going on, although sometimes when the class tests come back I really wonder if they're telling me the truth when I ask them if everyone is on the same page...

Give your definition of a student

My dad says that students aren't people, they're only half-people, I tend to agree with him. I don't think there is a single definition of a student, they come in many different forms. But you should know that students have more free time and disposable income than anyone else, and most of them take full advantage of this. There is also a huge difference between an undergraduate student and a post graduate student. Post graduates tend to be a lot more serious about most aspects of their lives, I suppose age plays a major factor here.

What subject did you like the least?

Analysis, both of them, I really don't want to elaborate.

What's your favourite past-time activity and interests?

Besides the shopping? I also bake quite often, and I make a mean cocktail. I enjoy watching rugby, the BBC channels on DSTV (Dancing with the Stars is one of my favourite shows) and classic movies (my favourite movie of all time is Casablanca). I read a lot of fiction and I love to relax with some wine and my friends.

What is the most embarrassing album you own?

I don't think this is embarrassing but my boyfriend does seem to think so. Britney Spears – Hit me Baby one more time. I've had it since I was 12. Most of the music I love was made before 1970 though.

What's your favourite restaurant?

I love good food, so I don't really have a favourite, as long as a place has great atmosphere and the food is yummy I'll go back. The best place for brunch and cake is definitely Isabella's though. They make the most fantastic red velvet cake!

Would you say it is true that an actuarial student doesn't have a social life?

Definitely not! We just have to be discerning about who we spend our free time with since there is so little of it. Our social lives will never match up to those students from the BA faculty (and I know this because I have friends who studied BA) but it's important to make time for those people who are close to you.

You are so involved with the Actuarial Department, lecturing and Aktua... how do you manage to get time for your studies as well?

Planning! IAS 211 and 221 students will be familiar with the calendars they receive with their study guides, well I have a similar system, only it's much fuller. I would extend that advice to any of my students, if you want to succeed in this field, you have to plan your time, and you have to make sure that you fit in enough time for yourself and your loved ones. If you are serious about qualifying you need to have the support of the people around you.

What do you still want to achieve?

I want to qualify as an actuary and hopefully obtain a PhD at some point. Other than that, I would like to be a successful person. I don't measure success in monetary terms only, I want to lead a wonderful life, and I want other people to be influenced by it.

SOCIAL EVENTS

Cluedo

Solving the crime and having a good time...

During orientation week the Aktua committee decided to give us a glimpse into the life of an actuary. By that I mean making us solve problems. In our case it was a murder mystery. We were instructed to play a game called "Cluedo", where we divided ourselves into groups and pretended to be detectives. Our task was to figure out which of the seven suspects played by the Aktua members, had murdered the victim.

The atmosphere amongst the first years was one of excitement. We were all eager to play the game and that was not just because there was a prize to be won (even though that was the main reason behind our motivation). This game challenged us to put our problem solving skills into practice.

When the competition had begun, we put on our game faces and literally raced all over campus trying to find our suspects. The more suspects we interviewed the closer we came to solving our case. As the game progressed most teams rushed to the Chemistry Hall in order to write down the suspect they thought was the murderer. Ironically the first team to arrive did not win the game. That honour went to the team that arrived third.

In the end we had great time and bonded with our fellow students. Whoever said actuarial students can't have a fun time was so wrong!

Jocelyn Mpanya



Quiz Evening

A few days after the 1st year orientation week, Aktua had held its first social event for the year, a quiz evening at Just Cuban. Everything had been arranged so that the night would start off the 2011 Aktua social year with a bang.

A large first year attendance was expected as this was the closest many of the res students would be getting to Hatfield for the next few months. Many senior students attended because they had not yet been overloaded with tons of work and tests. A big drawing card was the cocktail special, which was appreciated especially by the senior students because they knew that soon the above-mentioned work and tests would begin, soon.

At just past 7pm the quiz started with questions that were surprisingly similar to those that were asked at that week's News Cafe quiz (it must have been a coincidence). Some of the questions that were asked that evening included "How do you divide 12 by 2 to get 5?", "What is a nephrectomy?" and "Do you feel like sharing a platter with me?" The competition was tough and teams were neck and neck most of the time.

In the end the top two places were separated by a single point. However, the trophy was given to a group of 3rd year students. Each of them received a slab of chocolate but also something much more valuable: They can claim for an entire year that they are "Aktua Quiz Champions", a title which is not to be scoffed at.

Despite being fun-filled and entertaining, the evening showed most of us that while we are good with numbers, we will never have the creative mindset required to become national quiz champions. Which is why the next Aktua event will be a poker night. It seems that we are better with probabilities and money than we are with abstract questions that involve word play.

Albert Mijburgh

Poker night

Another display where actuarial science students were able to exercise their probability skills was at Aktua's poker night.

Thank you to everyone who participated. For those poker faces that missed out in 2011 will sure to be given a chance next year. So spend your time wisely and start playing poker.



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UIT AGIE SE MAGIE

First year

"Please put all notes away, do not take out a pen, do not write your name and student number and do not turn the page..."

Although we are only a few months into our studies, we are already deemed different by the look we get from other 'normal' students when we mention what we are studying. Although we might be insane in what we have chosen to study, we are 'normal' in many other ways.

For instance, in any other course, we also have our class clowns. By that I mean the ones who cannot stop talking because they know everything, the ones who cannot stop talking because they know nothing and even the ones who answer their phones during class.

COS has been one of our most interesting classes. It began with there being more students than seats. However, since the IT students realised that it was a repeat of matric, our numbers have dwindled. We now have enough space to stretch out on the benches for a well deserved nap. (Not that we actually do that...) This is the same lecture where we have to um, abbreviate words on the board because we um, ran out of chalk...

However, if you really want to leave class early and the chalk is not going to run out anytime soon... you can always set the fire alarm off and run out screaming like a girl...

Second year

We are no longer the lost little first years, rushing to what we hope is the right venue, but rather the veterans who now know everything (or at least that's we like to believe). Economics and Financial Management are things of the past (thank goodness), and now we get to happily speak about the probability of a 26 year old male dying before he turns 17, or something like that. Oh, and we get to tell jokes in Stats on a Friday, although most of them seem to be too "higher grade", because most of mine have been falling flat lately.

The work load has definitely increased. With five class tests and two practical assignments every week, and semester tests in between, it's no mystery that Linear Algebra and Informatics have become places to catch some sleep. But it seems that not only the students are taking strain.

Many lecturers (who I will not name, as they will be marking my exams eventually) have been seen managing their stress in the strangest ways, usually involving an overhead projector. Incidents include: in a sudden outburst, flinging one of these ancient machines right off a desk. When questioned by the repair man, he/she had no recollection of doing any such thing. Another lecturer, probably to chase the Monday morning blues, gives the poor projector a stern beating on a weekly basis. Some lecturers have even confused partial derivatives with Barcelona football players, as I quote, "These graphs can get a bit Messi." But I guess it's a common mistake.

All in all, second year is looking good. A nice group of students, brilliant lecturers, lots of sleep and only two classes on a Friday equate to happy times, happy students and happy hour at Aandklas on a Thursday night.

"Early to bed and early to rise... Ha ha. No thanks".

Third year

The infamous third year. Yeah, cool, finally! That's what's on most of our minds, although some subjects *cough* 310 *cough* may just well be the cause for some of us to stay on a bit longer. But, since we seem to realize we may be here next year, let's hope that some first-year lecturers don't walk off with our class' microphone, and entertain us during some transient state with boundless pleasure that only first-year stats can bring. Weird? You're not the only one who thought so...

Moving on, we also learnt thus far that insurance is none other than, wait for it, an onion! Apparently it has layers, although I'm pretty sure most students would prefer cakes (cakes have layers?), but my humble opinion is that it just makes you cry (the onion - but probably the insurance as well). Although... do you cry if you stick your hand in the lawnmower? Maybe, because it is painful, but it sure does pay.

Lastly, due to popular demand correlation now implies causation (!), as he have counted the number of storks and graphed clearing up any confusion, showing that, if you eat ice-cream before you swim, you will drown. Obviously.

Until next time... Keep your friends close, but 312 and 310 closer.

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