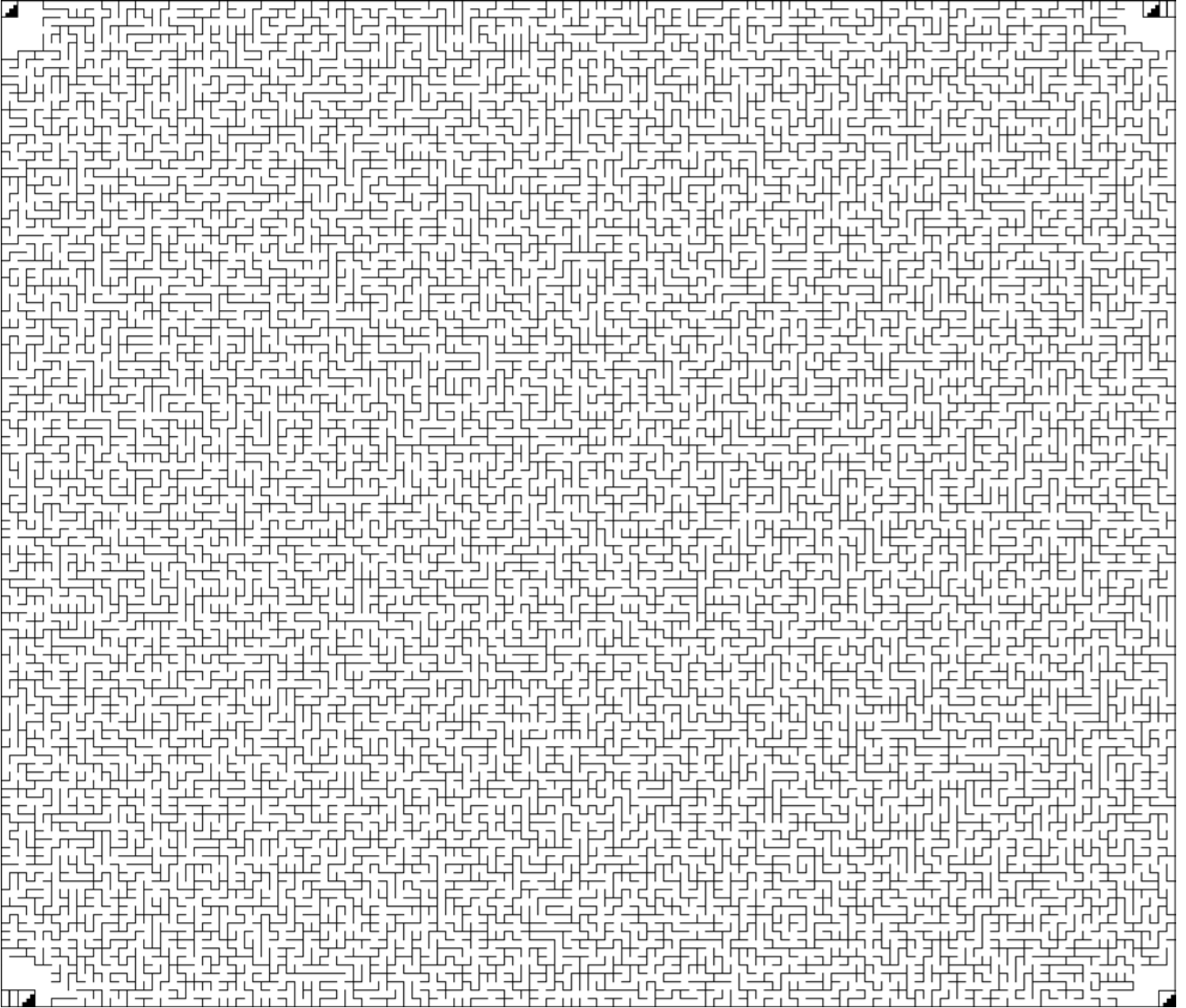


math

NEWS

Volume 99, Issue 4

Friday, November 4th, 2005



**Faculty proposes improved
layout for MC's 6th floor**

lookAHEAD**mathNEWS**

November 4 Issue #4 gets raked in
 November 14 Production night #5
 6:30PM, MathSoc (MC3038)
 All are welcome!

November 18 Issue #5

Math Faculty

November 4 Drop, penalty 1 period ends
 November 5 Drop, penalty 2 period begins
 December 5 Lectures End

MathSoc

Thursdays Movie Nights, 7:00 PM, MC 2066
 2 movies, 2 dollars!
 November Election nominations open
 November 4 Last day to get Charity Ball tickets
 November 12 Charity Ball

Math Grad Committee

Wednesdays Pizza Day!
 Buy cheap pizza to support the grads!
 December 1 Last day to file "Intent to Graduate"
 for Spring Convocation, if studies
 complete

CECS

November Various Workshops
www.careerservices.uwaterloo.ca

Student Awards & Financial Aid

November 22 Last day for Confirmation of
 Enrollment form
 December 15 Last day to submit Continuation of
 Interest Free Status forms

Miscellaneous

November 11 Remembrance Day

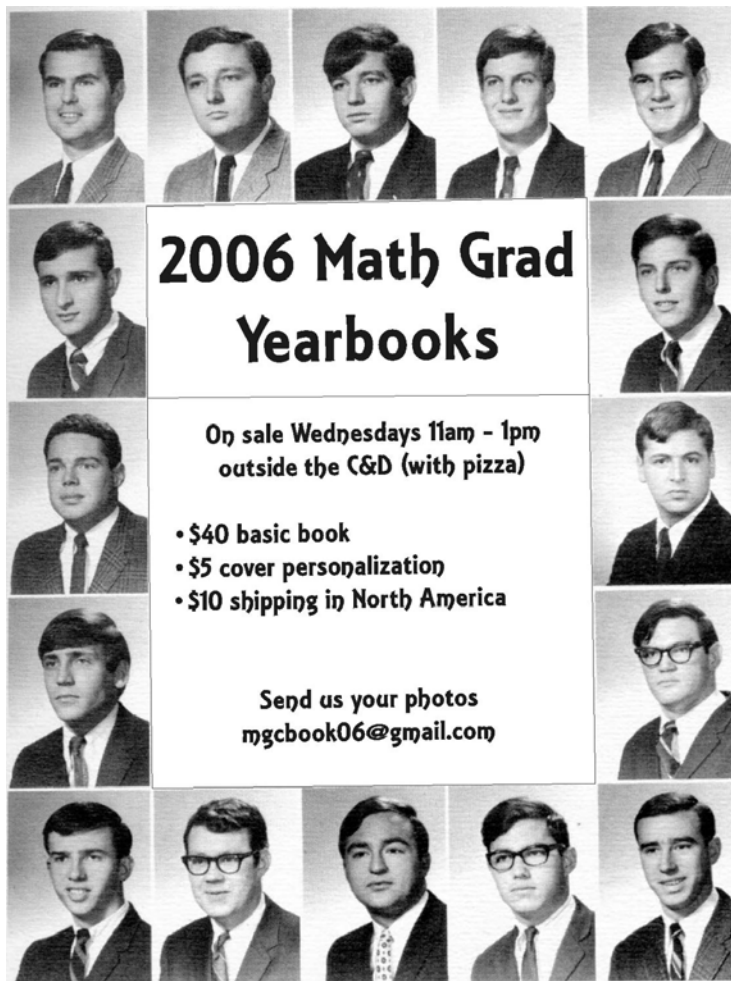
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 The editor(s): Mark Toivanen, Emerald Kushnier, Chris MacGregor

[Draws diagram on the board] "Anyone know what this is? No? It's a Klingon Battle Cruiser."

Chau, MATH 137



2006 Math Grad Yearbooks

On sale Wednesdays 11am - 1pm
 outside the C&D (with pizza)

- \$40 basic book
- \$5 cover personalization
- \$10 shipping in North America

Send us your photos
mjgcbok06@gmail.com

mastHEAD*Mmm... Chill & Grill*

Well, being first year CS midterms today, attendance was at an all-time low this evening, until we announced that we weren't ordering pizza (amazing how numbers just seem to shoot up when that happens). But yeah. Whatever.

Well, being All Hallow's Eve and all (Hallowe'en, y'know), we decided to ask our production staff something appropriate for the occasion: Trick... or treat? Jenn (Treat, when it comes in male form), Michael (Trick you into giving me food), Andrew/ShearedSheep (A little of col(A), a little bit of col(B)), DanS (hm... I got nuthin), Kaitlyn "Half-pint" (After my physical... both), π (Silly rabbit, tricks are for hookers), Val (4 assignments, 1 mid-term, 3 days does this count as a trick or treat?), Ali (There's a difference?), Eric (I'd like to trick you in to treating me... geditit? No? How 'bout this one: Nice boots.).

Mark "BeatleEd" (I'll trick you!)

Chris "SheepEd" (Caaaaandy)

Emerald "StatsEd" (In Soviet MathSoc, treats trick you!)

"Some people are nodding their heads and some people are nodding off."

Buhr, CS 343

VPA says

The two greatest words in the English language

Default! Default!

Due to the lack of interest in this position, I somehow managed to snag the position of VPA. This means many things; for one, I will be attending a lot of academic council meetings and making sure that you, the students, are informed of what's going on behind the scene as well as being the bridge between you and the professors. So if you have any questions or comments you want me to pass up the chain, feel free to let me know. I can be found hanging around MathSoc these days, and enough people know me that someone will know where I am.

Keep in mind that I just started, so chances are things will go very bad before getting better. They gave me lackies, so hopefully they will cover my mistakes. Look forward in the future to seeing a cram session for first year Math and CS courses; I will maybe have something planned by the time the next issue of *mathNEWS* is out.

Until then, it's another week of midterms, midterms, assignments more assignments for me.

If you have any questions, you can e-mail me at vpa@mathsoc.uwaterloo.ca.

Ivan *Sketchy* Chin

Want to write for *mathNEWS*?

But you can't make Production Night?

So, you want to write for *mathNEWS*, but you can't make it to production night? That's fine! We still love you! Now, here's the easiest way to do it:

Write us an email. Here's the catch: *mathNEWS* uses an HTML-like markup language, and we really like it when we don't have to tag the dozens of articles that come in untagged. So, you can always look up our mNmL markup language at:

<http://www.student.math.uwaterloo.ca/~mathnews/mNmL>

Once you've gone through this, you'll see how similar it is to HTML. The other things you'll need to know is that the *mathNEWS* system doesn't like seeing just &. Instead, it likes seeing & (same goes for > and <: it likes > and <). Now, about actually submitting your article, here's our easy-to-use system:

Email address: mathnews@student.math.uwaterloo.ca

Subject line: article (or any funky combination of those letters together, like aRtiCLE or any other of the 27 permutations)

Body of the email itself: your TAGGED article.

Attachments: DO NOT ADD ATTACHMENTS. Our system doesn't like them and we don't either. If you want to send us an image, send us an email with the subject as image and not your article in the body.

If you have any questions about how to do this, just email your friendly editorship team. We'll be GLAD to help you.

Mark Toivanen
Emerald Kushnier
Chris MacGregor

Math Grad Committee Social Events!

More fun than you can shake a stick at!

Hey all. Hope your midterms are going well and almost over. We have two more social events for grads this term (plus a lot more next term!). Come out and meet some of your colleagues while having a good time!

- **Casino Trip** - OK, this doesn't really belong here, since all the tickets are probably sold, but we're going to Fallsview Casino tomorrow! If you're absolutely desperate for some gambling action, show up outside the DC on ring road with \$10 (\$12 if you're not a grad) at 11 am tomorrow and you just might get on the bus. Tickets include \$10 in casino money upon arrival at the casino!
- **Pimps (CEOs) & Hos Night** - Still tentatively scheduled for Thursday, November 17th in the Bomber, starting at 7pm. Come dressed as a Pimp (or CEO) or Ho and enjoy free food and buy your own drinks. Male Hos and Female Pimps are of course welcome! ;)
- **Dooly's Night** - Now confirmed for Monday, December 5th (the last day of classes) from 4-8 pm at Dooly's on University Ave near Weber. Come enjoy some food, drinks, pool, and the company of your fellow grads before the madness of finals.

As always, if you want more information, look for posters, get on the MGC mailing list (sign up on the MGC board across from the C&D), email me, or check the MGC website at <http://www.student.math.uwaterloo.ca/~mgc/2006>. Thanks!

Diana Chisholm
MGC Social Director

dkchisho@student.math.uwaterloo.ca

NOMINATIONS ARE OPEN!!

If you would like to be a part of the Spring 2006 MathSoc Executive, grab a nomination form outside the MathSoc office (MC 3038), fill it out, and bring it back to the office.

Make sure that all the people who nominate you are valid members of the MathSoc (i.e. didn't get their MathSoc refund). If you are unsure, it might be a good idea to get a couple of extra nominations to ensure that your nomination is still valid.

The nomination period extends from October 31, 2005 to November 10, 2005.

If you have any questions, e-mail cro@mathsoc.uwaterloo.ca

CRO

"There's death, taxes and gotos."

Buhr, CS 343

"All bathrooms with locks are unsafe."

Buhr, CS 343

Exambank Raffle Extravaganza

How to turn a midterm into an mp3 player

For those of you who don't know, the Mathsoc Exambank is a treasure trove of past exams that you can peruse to get an idea of the format of an exam in a particular course, or the type of questions the professor may ask. We have exams from classes in every department in the faculty, and some from outside the faculty as well. We are currently trying to expand the Exambank since a lot of the exams are outdated, and the best way to encourage people to bring in their old exams is to offer **FREE STUFF!**

That's right. The Exambank Raffle Extravaganza is here!

Here's how it works: Bring in all your midterms to the Mathsoc Office (MC3038) anytime between now and November 23. If you bring us a midterm we don't already have, you get **3 raffle tickets**. If you bring us a midterm we already have, you still get **1 raffle ticket**. The tickets will be entered into a draw to win the grand prize of a **spiffy new MP3 player**. We are also raffling off **at least 5 gift certificates valued between \$10-\$20, to Future Shop, HMV, and Galaxy Cinemas**. The exact number of gift certificates to be raffled will be determined by the number of exams we get. So the more exams we have, the more prizes there will be.

The midterms don't have to be from this term — tests from previous terms will be accepted. We only need a copy, so you will get the original back. If you prefer, your answers will not be included in the exambank, so you don't have to worry about people seeing your work.

The more midterms you bring us, the more chances you have to win. It's that simple. Tell all your friends. Tell all your enemies. Remember, you only have until November 23rd, so start bringing them in. Who knew that midterms could be worth something other than pain after all?

Carol Tam

Resources Director, Fall 2005

resources@mathsoc.uwaterloo.ca

SASMS - November 23 and 24

Marvelled by matrices? Touched by asymptotics? Enthusiastic about exponentials? Then check out the Short Attention Span Math Seminars (SASMS) on November 23 and 24, where you'll see math students give talks about just how cool math is.

The **SASMS** are held every term by the Pure Math, Applied Math and Combinatorics & Optimization Club, and are a series of short (20-25 minute) talks given by math students on a wide variety of topics. Free food is also provided.

- Date: November 23 and 24
- Room: MC 5158
- Time: 5:00 PM

A detailed schedule of talks will be posted around the MC closer to the event. If you are interested in giving a talk then e-mail your topic to pmclub@student.math.uwaterloo.ca.

Alejandro Morales
Minister of SASMS

"Because we're both computer scientists and we behave like computers, we both end up in the bathroom at the same time."

Buhr, CS 343

ONE WATERLOO

So what's it all about?

University of Waterloo community is an undeniably multi-cultural, diverse institution. The students, faculty, and staff of UW come from around the province, the country and all over the world to make Waterloo their home. Similarly, our students, faculty, and staff all have distinctive backgrounds, values, and experience which make each of them a unique and valuable part of UW.

ONE WATERLOO is the ongoing University of Waterloo diversity awareness campaign, which puts emphasis on promoting awareness, acceptance and understanding of the various identifiable groups in the university as well as the uniqueness of each individual at Waterloo.

The ONE WATERLOO campaign's objective is to highlight several items about our campus including:

- the Different Perspectives of members of the UW campus, comprising great individual variety of backgrounds, cultures, viewpoints, and religious beliefs.
- the Distinct Talents that a wealth of perspectives brings to the UW.
- the Infinite Possibilities an abundance of unique capacities and points of view create for life at the University of Waterloo.
- the importance of Creating Unity by emphasizing the value in the differences of individuals, which serves as a source of strength to our campus community. This characteristic forms basis for strong, mutually supportive and responsive university environment.
- the importance of engaging and Celebrating Diversity at UW, a campus environment where differences can be openly explored, enjoyed and understood.

Rick Theis

Special Projects Coordinator

Student Life Office

Travelling Tips

Saves you time and money

The final exam schedule is out, meaning that next time your mother bugs you to make plans for coming home, you can't use "I don't know when I write" as an excuse to put off answering.

If you are taking the bus home and you are travelling further than Toronto, I suggest buying a ticket 2+ weeks ahead of your departure date. For many destinations, the early purchase price is less than the student price, and you can still buy at the SLC.

Pro: avoid long line-ups in the SLC.

Con: a bought-ahead ticket is only valid in a much smaller window of time than a regularly bought ticket.

Check pricing at Greyhound's website ahead of time to better figure out the price you're expecting to pay.

Half-pint

"That makes sense where the road system doesn't make any sense."

Lubiw, CS 341

Your Student Government Update

Hello! So it's been a while since I last updated you on student government. There are a few specific things I am going to tell you about:

- Reading Week
- Ancillary Services Fee
- Student Feedback Mechanisms
- Ideas for Improvement

Over the past year there has been much discussion about the discrepancy in the Reading Week schedules for Math and Engineering students. The most recent proposal is that the university go to a full reading week for all faculties and that the university will guarantee two(2) study days for Winter term and strive to achieve a maximum of 5 study days for the Winter term. There is an additional clause that is hard to explain in paragraph form that I will try to explain later on. My question to you is do you want a full reading week? Or would you prefer the current system where we get two(2) reading days and five(5) days before exams to study? It should also be noted that if we move to the new system, then the exam period will shorten by two exam days. That is we will lose 8 slots for potential exams to be in so your exams will probably be closer together.

The Ancillary Services Fee is a fee the university would like to introduce to make it easier for you to obtain transcripts, to whom it may concern forms, letters of permission forms, and verification forms. Currently, these all cost a set charge when you purchase them from the registrar's office. The university would like to make it part of your termly fees. The fee would be \$10.00 for full-time undergraduate students. Once you graduate, you will never have to pay for these services again. Unless the university goes back to the pay as you go system, in which case you'd have to pay for these services. Feds has announced that it will either

have a referendum on the matter or have a motion at a general meeting. My question to you is do you want the Ancillary Services Fee to be implemented? I am just looking for a general idea of what the students think so we can decide which of these choices would be better.

I would like to improve the current system for communication between students and their representatives. I would like for your student leaders to help you best and not waste time working on ideas that you do not want. I am mainly referring to the fact that I wrote a policy that students did not want. As a first step, you can contact me at atfelix@uwaterloo.ca anytime. I would like suggestions on how you would like me to report to you and for you to get in contact with me. Please email me with anything you feel is relevant academically.

A few years ago, ON MY ONLY WORK TERM (don't worry, I'm not that bitter), I worked on features for Quest that allowed students to see how they were progressing through their degree requirements. I would like to see this finally phased into the system. I would also like to hear ideas you have about your academics and improving them, ways of implementing these improvements, and other such related things. Please tell me anything that you think is broken with the current state of your academics and possible improvements for them.

Adam Felix

Math Student Senator

Math Feds Student Councillor

AND DON'T FORGET TO VOTE TODAY (FRIDAY NOVEMBER 4TH) FOR YOUR MATH STUDENT COUNCILLOR IN THE BY-ELECTION!!!

mathNEWS Interview

Part n: Ask Jeeves

In my tenure here, I have seen *mathNEWS* do many different interviews, the most notable one being done by Craig "Eigenvector" Sloss when he interviewed Google. As I have not seen an interview done recently, I decided, why not do a full-fledged interview with an outdated search engine? So, I decided that <http://www.ask.com> (also known as Ask Jeeves) was the proper target.

mathNEWS: So, you've been around for quite a while. What keeps you going?

Ask.com: to be kicked when you're down to feel like you've been pushed...but I'm not going to be ok; 6:53 PM you might think i'm...well we joked around like one hundred percent of the time, so we couldn't have...

mathNEWS: Kicked while you're down, eh? That must not be very fun. Who's doing the kicking?

Ask.com: Welcome to Ameristan. You're American, deal with it... and learn some basic history while you're... You're not stupid, you're... I'm sure you're all very happy out...

mathNEWS: Ok, so back to the point of this interview. How do you plan on competing with Google?

Ask.com: Effective Interview Tips. High-Impact Interview Ques-

tions Book by Victoria A. Hoevemeyer.

mathNEWS: The question remains; Google makes money with advertising. How do you make money?

Ask.com: Advertise on AdWords. Weapons for Winning The War On the Right Side of the Page.

mathNEWS: And who's your biggest client?

Ask.com: SHE'S GONNA LOSE OUR BIGGEST CLIENT! 11:39 am Post: 764872 — SHE'S GONNA LOSE OUR BIGGEST CLIENT! I have an out-of-town client who I've benn... needed, would backfire — she'd just...

mathNEWS: Well, thank you for your time, even though you haven't really answered any of my questions.

Ask.com: Fear of Flying Help — Comments 2001...did it, but I was never really comfortable on the plane. Your website has helped me a lot, and answered lots of my questions. Thank you again so...

And there you have it, folks. This is what you get when you do an interview with a search engine, and an outdated one at that.

Mark "Beatlemaniac"

Trick-or-Treating

From the other side of the door

So it was my first Halloween with a real front door to call my own. I decorated the front stoop weeks ago, bought some candy, bought more as the day approached and I figured I'd get more than 70 kids, put myself in a princess costume (random fancy dress from my closet), and then made myself comfy at home to write my column in easy dashing distance to the door.

In all, I only answered the door 5 times for a total of about a dozen kids. But I tell you, it was worth it. The kids themselves were adorable (even the ghouls), and I might have done the whole thing for the tiny love bug who gaped, raised her bag and yelled "TICK o tea... tank queue!"

The best part, however, was having a neighbour come over to chat while I was bringing in decorations. I felt like part of the neighbourhood when he walked over and asked how many kids I'd had at my door and told me the numbers from previous years. I liked having the connection to at least one neighbour after 2 months here.

So I say to those of you with front doors: put out a pumpkin (I didn't even carve mine), buy a box of goodies, and let the cuteness come to your door. Then, come over and help me eat my leftover candy. Please.

Half-pint

GIS Day at UW

Wednesday November 16th, 2005

To coincide with worldwide GIS Day events (see <http://www.gisday.com>), the University Map Library and the Faculty of Environmental Studies will be hosting an afternoon of GIS Day events on Wednesday November 16th, between 12:00 - 3:00 pm in the ES1 Courtyard and the adjacent seminar room, ES1-221.

All UW students, faculty and staff are invited to participate in celebrating GIS Day. Learn what GIS is and how it can be used in both your academic and personal lives. Stop by to view the poster gallery, GIS projects and other geospatial and departmental displays. Learn and engage in conversation with UW staff, students and faculty about their projects in this area, and vote on your favourite GIS poster to help choose this year's GIS Day Poster winner.

Hear a talk about the Map Library's geospatial data resources, the kinds of research your fellow faculty and students have been working on, and learn about the types of software you can use for viewing and manipulating data.

Door prizes and light refreshments!

For more information and to register please visit <http://www.fes.uwaterloo.ca/gisday/>

Eva Dodsworth
University Map Library

[Prof] "It's not terribly hard, it's just complicated; that means you could do it, you're just too lazy."

Verstraete, CO342

Cooking 101

Lecture 2: Rice

After much thought and debate, we selected a topic for discussion. I am always surprised to hear a person say "I can't cook rice, I don't know how!" So, we present to you an overview of rice, and in particular, how to cook it.

There are several types of rice available. White rice is the most basic kind, but the most bland and the least nutritious. It can be bought normal or parboiled (parboiled rice cooks quicker). Basmati rice (Ali's favourite) has a sweet, nutty flavour and curved grains, and goes well with Indian dishes. Jasmine rice (Jenn's favourite) also has a lovely flavour and straight grains, and goes well with Oriental dishes. Brown rice is the most nutritious, but has a more chewy texture. All these varieties of rice are readily available, though you might need to look in the International Foods Aisle.

One very important thing to know about rice is that it expands when it is cooked, rather like pasta. A good rule of thumb for measuring is 1/4 cup of dry rice per person for a normal side serving. This makes about 3/4 cup of cooked rice per person. *Do not*, for example, use two cups of dry rice if you want two cups of cooked rice. It does not work like that.

How Do I Cook It?

The Rice Cooker. This is hands-down the simplest way to make rice. According to the directions of your specific cooker, you measure out the rice, add water, and flick the switch. It cooks itself, and will keep warm for generally up to four hours in case you forget about it. Rice cookers usually cost around \$50, but if you keep your eyes on the Zellers or Canadian Tire flyers, you can find them as low as \$20. This makes the best-tasting rice. Jenn and Ali agree: *It's worth it!*

Easy Boil With Excess Water. This is the lowest-tech method, but produces easily the most bland rice. Pour the desired amount of rice into a pot, and fill the pot half full with water. Bring it all to a boil, stirring now and then to prevent sticking and burning. When it begins to look soft, carefully use a fork to test a few grains — if it is soft, you're good to go. Use a colander (strainer) to drain the rice.

Measured Boil. This is slightly more difficult, since you have to measure the rice and water. Two parts water to one part rice. Or, in numerical terms, 1/2 cup of water for each 1/4 cup of dry rice. This should boil off all the water, leaving you with nice, cooked rice.

If you happen to burn your rice to a black smelly crisp (and it can happen to the best of cooks), *do not panic*. Scrape out what you can, and fill the pot with water. Let it soak for a good long while. It should be easy to clean then. Just do not let it harden, or it is a nightmare.

So there are the very basics of cooking rice. As you get more familiar with it, it becomes habitual, and you can begin using spices and sauces. This is just an intro — the world of rice is delicious and versatile!

Ali and Jenn

Questions? Comments? Concerns?

Email us at mNcooking@yahoo.ca

**Today is your last chance to
buy Charity Ball tickets!**

ElseWhen

25 Years Ago in mathNEWS

This is the column (sometimes half-page) where I do a retrospective of issues of *mathNEWS* that were published 25 years ago in 1980. I always found old issues to be an interesting read, so when I saw an old column called “ElseWhen” that did exactly this (albeit somewhat shorter), I immediately decided to restart the tradition. Anyway, 25 years ago, *mathNEWS* was publishing weekly, which means it contained way more news than it does now and also makes the life of your poor archivist somewhat more difficult. Without further ado, a precis of Volume 24, Numbers 7 and 8, originally published October 24th and October 31st, 1980, respectively.

ink_13

Number 7: Stop Press! Bondage Page 8!

- Recent campus improvements include the construction of ES2 (which was not connected to the Arts tunnels at the time, a subject, I’m lead to believe, of some consternation), a parking lot outside the MC(!), B2, as well as one outside Minota Hagey Residence, and lights along the road to Bauer Warehouse, old home of Radio Waterloo.
- A Mathie has won the first-annual EngSoc bike race (9 miles in three laps with paved straightaways but gravelled corners — ouch!)
- Some of the things on this term’s MathSoc Scavenger hunt list include: A piece of SkyLab, a female UofT artsie in a gunny sack, a TTC bus, and “twenty feet of shoreline”.
- The Campus Centre Pub, recently renovated and rechristened the “C.C. Bombshelter”, now provides better beer and a pay-by-the-ounce salad bar from noon to 8PM, but still plays the music MUCH TOO LOUD.
- Some filler: “OH! I wish I was an accounting student at UW.

I could go to the GREAT PARTY this Friday. Everyone I know would be there after the meeting. OH! I wish I was an accounting student.”

- Someone wrote a very interesting biography of Prof. W.J. Gilbert. Fun fact: Prof. Gilbert had written an unused textbook at the time containing the radical idea that vectors be used to simplify the teaching of linear algebra.
- And now, the promised bondage: The Mathsocists broomball team whipped the opposing (yet seemingly willing) Free Radicals of ChemEng into complete submission Sunday night with a score of 15-1.

Number 8: No entertaining headline

- Spring ’81 Pre-registration will be November 5-7.
- The Math-Kin Pub (“Dress Tacky”) approaches.
- **Quote of the Week** (From the UW Gazette, October 22, 1980): “Fewer Faculty: This year UW has 744 full-time faculty members...The figure at the same date a year ago: 744. So the complement has dropped by 0.4 percent.”
- Winners of the scavenger hunt are Tracy Tims, Doug Moen, Darrel Larue, Sean Mullarky, and Maureen ?, who got 228 points over 26 items that included the previously-mentioned UofT Artsie in a gunny sack, the Playboy Centrefold of September 1971, a baggie full of horsechestnuts, and the rates of the wedding suite of two Toronto hotels on the hotel letterhead.
- Elsewhere, Joanne West explains the old job match algorithm (it had a random number generator in it – seriously!), John Plaice (mad cyclist) gives tips for biking in winter, and MathSoc elections for the coming year have been opened.

Cooking Lab #3

Shepherd’s Pie

Ingredients:

- 6 medium potatoes, scrubbed clean
- 1 lb. ground beef, thawed
- 1 12oz. can creamed corn
- 3 cloves garlic
- 1 small onion
- 1 1/2 cup carrots
- milk or soy milk
- butter or margarine
- salt and pepper
- paprika
- hot sauce (optional)

Directions:

1. Chop the potatoes into small-ish pieces. The smaller they are, the faster they cook, but smaller than 2x2 cm is just getting silly. Put the pieces in a pot and cover them with water. Place them on an element to boil.
2. Put the ground beef in a pan. While it cooks, chop the onion finely and crush the garlic. Add some salt and pepper if you so desire. Cook them with the beef, and try not to burn them.

When the beef is completely brown, remove it from the heat and mix it together with the creamed corn. (Hot sauce to your taste can be added at this juncture.) Spread the mixture into the bottom of a 23x18 cm baking dish (rectangular).

3. Chop the carrots into bite-sized discs, and spread them on top of the meat and corn mix.
4. When the potatoes are cooked, drain them and mash them. A potato masher works best, but a sturdy whisk or even a fork will do. Mix in a tablespoon and a half of margarine and a half cup of milk. Keep mashing until your potatoes are creamy and smooth. Spread them on top of the carrots.
5. Top the potatoes with a generous sprinkle of paprika (or you can use shredded cheese).
6. Bake the dish in the oven at 350 degrees Fahrenheit for 20 minutes.
7. Eat and enjoy, for food is good!

Ali and Jenn
Questions? Comments? Concerns? Email us at
mNcooking@yahoo.ca

Horrorscopes

Because I said so

Accounting

Spice up your otherwise boring life by asking a professor to sing "Badger Badger" during an arts lecture. You may look odd, but your knowledge of the song makes you part of the exclusive worldwide club of geeks! (Yes, that can be a good thing.)

Your lucky number is 7 wasted lecture minutes.

ActSci

Still don't have a date for the Math Charity Ball? While going stag is an option, it isn't a very good one. Your best chance at getting a date is to stop hanging out in the comfy or the ASC. If that doesn't work, ask random artsies in AL. Just don't expect stimulating dinner conversation.

Your lucky number is 1 easy artsie.

AMath

What is dark, gloomy, and makes me laugh hysterically? Could it be your homework load, or is it just your horrorscope? Perhaps it is both. Watch out for black cats and kids still dressed up like Harry Potter. Both are dangerous to you this week.

Your lucky number is 9 lives, 8 of which you have wasted.

BioInformatics

Experimentation with stem cells will make you a target of protestors when you find a new algorithm for analyzing their uses. You will ignore the ethical considerations after they offer you a research grant and a big office. Of course, this seems better than it is, since the office is in the middle of the 6th floor of the MC. Good luck finding it.

Your lucky number is \$80,000 a year.

C&O

Half way through the term, I only have one thing to say to you: stop eating all my cookies! As a cookie monster, I need them to stay alive and finish my Graph Theory homework. Cookies are crucial to the understanding of Graph Theory, and they are all mine.

Your lucky number is a lower mark in Graph Theory than me.

Computational Math

You find yourself having a lot of free time lately, mostly while waiting for your super computer to run your slow but effective algorithm for the travelling salesman problem (the runtime is clearly much more than $O(1)$). To fill the void, volunteer for MathSoc, or even *mathNEWS*!

Your lucky number is 3 extra volunteer positions for your resume.

CS

Shoot that puck! Score that goal! Win win win! Your life now depends on the standing of your favourite NHL team. Read their horoscope to discover yours. I sincerely hope you aren't rooting for the Leafs.

Your lucky number is the bottom 10% of the league (or the class).

Double Degree

You will soon begin to build a tunnel from the MC to the Laurier campus to make travelling in the cold easier. The contacts you can make and the experience you gain will be invaluable, as will the \$2 you will charge per use. Please finish it before it gets too cold.

Your lucky number is 2 terms paid for by your fellow students.

MathBus

So you've gotten on the bus, the bus to math learnin'. And here in the 'Loo we can learn you good. Just don't expect to be able to

talk intelligently with a non-mathie by the time you get off the (slightly smelly) bus. The geek jargon and 133t sp34k will ruin you for life.

Your lucky number is 9 confused prospective employers.

MathPhysics

The changing seasons bring changing barometric pressure. Calculate the effects on every science experiment you have ever done, even if barometric pressure doesn't seem to effect it. The time will be well-spent as long as you learn something. And that lesson could be that your horrorscope writer is out to get you.

Your lucky number is 57 hours of drudgery (for a good cause).

Math Sciences

Too much randomness in your course selection is making you long for some direction. Don't pick Stats, that will only give you more random variables to juggle. Challenge yourself with a fourth year PMath class. It will increase your tolerance for randomness over concentrated horror.

Your lucky numbers are 1 PMath and 4 Arts courses.

Operations Research

Making the trains run on time is a difficult task, and takes lots of mathematical work. Team up with the the Real Time students to make your job easier, and a lot more fun. If they try to make you take your pants off, threaten to break their toy trains and they will leave you alone.

Your lucky number is 2 legs still firmly in your pants.

PMath

Instead of stressing over your hard courses, de-stress by taking a relaxing week off. You will feel rested after sleeping in every day, and may even have time to spend with your friends. And if your marks drop, that can only help me when the class average needs a boost.

Your lucky number is 12.7% below the class average.

SoftEng

If you have been plotting with C&O to steal my cookies, forget it. Just because you can't bake, and you can't rely on your degree to get you a paying job so you can buy your own, doesn't mean you can have mine!

Your lucky number is all your cookie are belong to me.

Stats

Being normal has become too boring, so this week, make your life more complicated by changing the distribution of your sleep. Try going to class in the morning, sleeping in the afternoon, and partying all night. Just don't party too hard, or you might soon be sleeping with les poissons.

Your lucky number is π hours of sleep per day.

Teaching Option

Want to know the best way to get teaching experience? Harass some frosh by following them around. That way, you can watch the animals in their natural habitat: frosh are just high school kids who have been kicked out of their homes.

Your lucky number is 30 hours of 'observing' experience.

Undeclared

If you could decide on a Halloween activity, I hope it was more fun than coming to *mathNEWS* production night. Decide against fun, free food, and good friends, why don't you. Fine, see if we care. Okay, we care. Please come!

Your lucky number is 0 slices of free pizza.

Horrorscopes

Continued

Eng

Still coming down from post-Halloween parties? It figures that the only way you can pick up girls is by dressing up like Superman. Your usual beer with the guys progressed to a real party for a short time, but the only way to prevent a backslide is to gain some super powers. Good luck, buddy.

Your lucky number is 2.8 seconds. Think about it.

Sci

Is the monster you created on Halloween still lurking in your basement? Teach it to walk and talk, then send it to university (one which will not be named). Or better yet, submit it for a Nobel prize in science. If you are a failure and could not make a monster worthy of Dr. Frankenstein, submit yourself for a Nobel prize in science. Who knows, you could get lucky.

Your lucky number is `math.random("I want to win")`.

AHS

As a future sports doctor or biologist, you have a long tradition of excellence to live up to: Daffy Duck, Pinky and the Brain, and especially Penny. The best way to do this, contrary to popular belief, is to learn some math. The universe is built on number theory. Get used to it.

Your lucky number is the axiom of choice.

ES

Global warming has finally come to haunt us by changing our weather patterns. The cold, rain, and falling leaves are signs of horrible things to come, such as cold snaps and falling ice. These of course lead to the apocalypse. Build an ineffective monitor of the apocalypse to tell you how bad it is getting, even if it can't help anything.

Your lucky number is 11/09/05. The end is near.

Arts

Hey, you have lots of time on your hands! Why don't you make me more cookies, so I can keep up in Graph Theory? You have nothing better to do. Good things will come to you if you do, like a purpose in life.

Your lucky number is 4 years spent "finding yourself."

Dirty Mathie

mathNEWSquiz #4

I think it's 4...

This past issue had two quiz submissions from David Jones and from Marg Doyon & Christin Strong. After tabulating the results, it's David Jones who will take home the C&D Gift Certificate. Congratulations David.

Now, on to some questions:

Saved By The Bell

- Who is the principal?
- What is the name of the resort the gang worked at during summer?
- Who was the owner?
- Who were Zack & Kelly dressed up as when they broke up?

Blossom

- What's the name of the theme song from Blossom?
- What does Blossom's older brother suffer from?
- Who plays Blossom?

Apples & Stuff

- What are the three most common colors of apple?
- What object, which contains hoses, is also one of those colours?
- What object, which is really hot, is often thought of by children as being one of those colours?
- What object, that often changes colour and falls, is one of those colours in the summer?

That's all for this week. I was busy proctoring an exam on production night so I didn't get a chance to come up with more questions. Submissions should go to the BLACK BOX or e-mailed to mathnews@student.math.uwaterloo.ca before 6:00pm on the 14th of November, 2005.

π

mathNEWS Gets Details on Alliance Race

There is no doubt that Blizzard's World of Warcraft is one of — if not *the* — most popular computer game at the moment. It is mostly because of this that Blizzard was able to hold BlizzCon last weekend. The highlight of this event was, of course, the announcement of the highly anticipated expansion pack for World of Warcraft. I won't go into the details of the announcement because I know that if you actually care then you already know them, and if you don't care then odds are pretty good you're not even reading this anymore. There were several details omitted, but luckily for you, *mathNEWS* has a friend who's a co-op at Blizzard this term, and we were able to sit down and talk with him about something that may or may not have been against his NDA (and as such, his name will not be mentioned in this article).

The one thing that everyone wants to know is, "What is the new race the alliance is getting in the expansion?" Of course, we

were able to get the answer; and boy did it surprise us. The new alliance race in The Burning Crusade is... Dragons. Yes, you read correctly, dragons. You might not believe this, but our co-op friend had a very reasonable explanation of the process used to come to this decision. "We have just gotten so sick of players arguing whether or not Blizzard liked one faction more than the other, and if so, what our preferred faction is. We decided it was time to settle this once and for all, and, quite frankly, we *do* like the alliance more, so they get the dragons." Racial abilities for the dragons include flight and a breath weapon that does anywhere from 1000 to 30 000 damage.

Well, that's the little inside look at the new expansion. Keep watching us, and we'll be able to get you information as we learn it (and much much faster than any of the other gaming news places out there).

DanS

Living in Sin

Week 4: Lust

Oh yes. You didn't think I was going to let this sin get away without its proper treatment, did you?

Sex. Where does it come from? How do you get some? What are the author's suggestions on the most discreet bondage shops in every major city between here and Thunder Bay?

This article will answer none of those questions. What I'm writing about are the two kinds of sex — the null case and safe sex — and how you can ensure that the latter is as safe as possible.

We all know that, solo sex aside, these are your only options, right? Good. So how do you do either right?

The null case.

More commonly known as abstinence, this is by far the safest form of sexual adventure. Sure, it's also the trivial case to prove, but *not* everyone is doing it and abstinence deserves its time in the spotlight. Choosing to abstain from sexual activities will decrease your risk of contracting STIs (although there are other risky activities that can spread some infections) and DEFINITELY protect you from an unwanted pregnancy (and if abstinence fails you on this one, you get the added bonus of starting a religion as a result).

The choice to not have sex could be motivated by simple disinterest in sex, a personal choice to wait (until the feeling is right, an engagement, marriage, or any other indicator), or because it is the only 100% effective method of birth control (and, if mixed with other responsible behaviour, a very effective method of infection prevention) and any failure rate lies at the fault of the user and not statistical chance. Besides, we're mathies — we know 99.9% != 100%.

Safe sex.

So now we'll assume you're mentally and emotionally ready to take the leap with your special someone. This article does assume a monogamous relationship since, well, that's what my column is about. I won't play psychologist and pretend I know what "mentally and emotionally ready" means, but chances are that you will know when you are.

Before you get down and dirty with a new partner, there are a host of good reasons to give yourself a complete sexual health checkup. Since *contraception* comes in so many forms which may or may not protect against diseases, having a clean bill of health will give you more freedom in choosing protection. If you or your partner have been involved in other relationships, or (god forbid) you've dabbled in high-risk activities in the past, knowing will also clear your conscience.

I wrote to Health Services to answer some FAQ about getting checked out and choosing protection.

Living in Sin: What kinds of checkups should be booked?

Health Services: Students should (as always) book annual physical exams. Women should include pap smears once they become sexually active. Students should have a supplemental "STI checkup" if they are considering becoming sexually active with a new partner. To request the correct checkup, ask for a "physical (and pap smear if applicable)" or an "STI check up."

LIS: Who can the appointments be booked with?

HS: All are available either from on campus doctors or a family physician or local Public Health Department.

LIS: What can students expect at these appointments?

HS: The physician will review the student's history, perform a physical examination, and do any lab tests if necessary.

Once you're deemed healthy, you're ready to go, right? WRONG (same-sex couples are exempted from this lecture). *You or your partner could get pregnant.* Whether it's the first/last time you have sex, whether it's early/late in her cycle, and definitely whether or not you are ready. And you are probably not ready. So, what to do to reduce the chances?

LIS: What resources do Health Services recommend for information on birth control?

HS: We offer many different pamphlet resources on various birth control methods. Students are welcome to stop by and pick some up or talk to a nurse to obtain some.

LIS: Which methods of prescribed protection are available through Health Services? Are they covered under the student drug plan?

HS: Any prescribed methods of birth control that are available in Canada can be ordered by doctors at Health Services. Most contraceptive methods are covered under the Student Supplementary Health Insurance Plan with a few exceptions. Students can discuss this with the physician at the time of their appointment.

Also, don't forget that condoms are available free of charge from your don. You also had one included in your frosh kit. And no matter what method of protection you decide on, remember to read and follow all of the directions carefully — right down to how to store it properly.

We all enjoy a certain degree of daily risk — we couldn't get out of bed without accepting some as a fact of life. The key is finding the right balance between activities we enjoy and an acceptable level of risk taking. Abstinence is right for some, but if you're emotionally ready and have taken precautions, safe and loving sex can be just that — safe and loving.

Half-pint

(with a giant thank you to Tammy Hoffmann at Health Services)

Top 5 Things Bill Gates Said

Out of Context

Many of you were not able to attend the talk given by Bill Gates a little over a week ago, and it really wouldn't be surprising if you were too lazy to go to the DC or SLC to watch it broadcast. Luckily for you I was able to be there to give you the top 5 things he really said, presented here free of context.

- Parallel programming is easy

- No one wants to work for Microsoft when they could be a farmer instead
- Microsoft likes Linux
- When talking about music players you cannot forget Apple's iPod
- MS Office sucks

Sexy, successful... and single?

Here's the scene: A woman is spending way too much time around the cheese tray at her neighbour's drab get-together when suddenly a tall, dark and handsome gentleman approaches. After about 30 seconds of swapping stories about how they each know the host(ess), he predictably asks her, "So what do you do?"

Such a situation demands some questions:

1. Who actually attends drab get-togethers?! Really?!
2. Why is the woman spending her time around the cheese tray, rather than confidently reaching out, and joining in the conversations, introducing herself to people she doesn't know?

According to some article, such women are those with impressive jobs — doctors, lawyers, engineers and investment bankers.

Apparently, a woman having an impressive job always yields the same reaction from a man, namely confusion and awkwardness — that moment when he's wondering, "Is my job as an assistant manger of a copy shop going to sound pitiful?"

First, I don't believe this *always* runs through the mind of *all* men, and second, you're damn right it might sound pitiful. But on the other hand, it's the truth, and people should take pride in the jobs they have. If the copy shop position has the fellow hesitating to reveal it, then why didn't he aim for somewhere else?

It's assumed that just because you have a lot of degrees on your wall that you don't have a lot of suitors at your door. But with the increasing equality of women in intelligent fields (in 2003, women accounted for 36% of all chemists, 28% of all lawyers, 30% of all physicians and surgeons, and 66% of all psychologists), there's no reason to try to continue the illogical norm of dumbing down your profession just to "get the guy." Guys need to get used to the idea that just as other men might intimidate them, so too can other women.

So are successful women doomed to a life of tense cheese-tray conversations? Dear gawd, wtf? I'm shocked they're hanging out at the cheese tray (successful careers often mean a bigger confidence level than hiding at the food table). And who's to say that the woman's going to some cheese party to get hooked up? Life does not revolve around finding a significant other. But, for the love of staying on topic, let's say Jane is a successful business-

woman who is somehow able to find time in her busy schedule to date, and wouldn't mind doing so. Some suggestions for Jane: **Give advice** If you get the feeling that a guy is intimidated by your profession, take your cue from some guys you've talked to in the past, and go into gory details about what your work entails, arrogantly confusing the hell out of them. Realistically, you're an intelligent human being who's worked damn hard to get where you're at, so why are you expected to look incompetent rather than taking pride in your accomplishments?

Getting Over Inequality Say you're going out with some guy who doesn't have as many degrees as you, and he keeps on making an issue out of it. First, question why you're hanging out with such a one-track minded fellow. If you can generate an answer, then do make an issue about it. Before going on a date, read a few current journal articles to discuss over dinner and press it in his face that you've got more degrees that he does. Once he finally cracks and states he can't take it any more, explain that as long as he makes it an issue, you'll be happy to make it an issue, and that once he's gotten over it, then you both can go back to being happy together. He should be proud of your accomplishments, rather than make you feel inferior for his inadequacies.

Proper Training If you happen to go off to a wine and cheese party and be upset with him for introducing you as his sugar mama, at the next event make sure he's got a collar on, and introduce him as your little puppy. Having the money in the relationship means you can dress up your significant other any way you want, right? Anyway, he might get the idea to not mention it again. Alternatively, it might make the relationship a bit more kinky. ;)

Sensibly, one shouldn't always talk about work. Talk about things you both enjoy outside of work. Duh. And if you do want to talk about work, swap stories, and try to get a sense of what the other person's job entails. Perhaps he'll learn a thing or two about your job, and similarly you can better understand his. And if he's got a problem with your job, the Stag Shop is never so far away as to pick up a whip and chains to teach him some manners.

Who's your Momma now, dick?

House of Nerds



profQUOTES

“Does anyone hear a ticking in here? [A bunch of students point at the radiator] OK, so there isn’t a bomb about to go off; nobody’s out to get me.”

DiCesare, STAT 230

[Phone rings for second time] “If they call again, I get to talk to them.”

DiCesare, STAT 230

“On your exam, you can not use matlab.”

Furino, CO 350

“For the next few days, watch my arithmetic with great care. I don’t promise I can do arithmetic properly.”

Furino, CO 350

“I think my brain has left my head today.”

Furino, CO 350

“If I don’t push on puff the magic dragon, eventually it’ll stop.”

Marshman, AMATH 250

“McDonald’s can’t figure out why McAmericans won’t eat McChickens.”

Smith, ECON 101

“Anything that consumes a parent will also consume a child.

Ragde, CS 135

“When you hire an actuary, it’s not like Halliburton in Iraq.”

Sivakumar, AFM 472

“Rock Paper Scissors is a game that also exists in Germany... it’s very complicated.”

Konemann, CO 459

“We will do specific cases — after I take this stone out of my shoe.”

O’Donovan, PHYS 121

“Next week they’ll invent, I don’t know, ‘dark aliens’. They’re the ones we can’t see. Because they’re in the dark.”

O’Donovan, PHYS 121

“If you need a moment [to copy the notes off the overhead], all I need is a hand signal, and hopefully not an obscene one.”

Vaughan, ECON 223W

“I cried the first time I saw this. I was cutting onions at the time mind you, and my dog had just died.”

May, CS 234

“I have no idea what I’m writing. I’ve got to lay off the crack in the morning.”

May, CS 234

“I expected a very low average for this midterm. [pauses] I just realised my professor evaluation is going down the well.”

Furino CO 350

“Good thing I’m not taking this class, or I’d totally fail.”

May, CS 234

“For the purposes of this class, $2\pi i = 1$ ”

Hare, PMATH 352

“If you have an x^2 in there, then you’re screwed.”

Goulden, CO 330

“If this was a business class, then ‘paradigm’ would be synonymous with the words ‘bull shit’.”

May CS 234

“There are so many good things on TV, why would you design algorithms?”

May, CS 234

“I spend all morning thinking of these jokes, and since I tend to sleep in, there isn’t much time to think up jokes.”

May, CS 234

“I’m a dumbass.”

Spronk, PM 453

“Maybe you can give that young lady there a nudge and wake her up.”

Morgan, EARTH 121

“Excuse me a moment, I’m just going to go yell at some people.”

Morgan, EARTH 121

“They said, ‘We can’t stop you from going up there,’ so of course we did.”

Morgan, EARTH 121

“While every sane person runs away, geologists gallop off to see what the hell is going on.”

Morgan, EARTH 121

“If you ever get into a fight at school, you know, whip out your flint nodule and make ‘em think twice.”

Morgan, EARTH 121

[While pointing at a slide] “This I’m sure would have been handy to have gone over before the midterm.”

Morgan, EARTH 121

[While pointing at a slide] “I play ‘The Giant’ with my three-year old and I wear a crazy yellow hat. [pause] But it’s not like this, I promise.”

Porreca, LAT 381

[prof writes on board] ‘Proof: Tricky Anal.’

Wainright, AM 231

[student] “Will there be a lecture on Friday?”

[Prof] “Oh, yes! Lectures are like religion!”

[student] “Oh, I am so going to hell.”

Singh, ECE 354

[Prof] “I get the feeling you guys have something else due today... you’re not really paying attention.

[student] “We have your midterm today.”

[Prof] “Ah! I’m the culprit.”

Singh, ECE 354

Engineering creates a new program

Pavement engineering

The Engineering faculty recently opened a new pavement lab while they design a new program based on pavement. Courses will include:

- **Mixing:** Because every good pavement engineer should know how to mix.

- **Pouring:** There are actually multiple techniques. One must make sure that pouring does not cause unwanted mixing.
- **Density:** Different types of pavement have different densities. The course focuses on this aspect.
- **Union Representation:** Knowing that you'll likely be employed by a union, you'll need training on how to fight *The Man*. Remember, you must always insert "job security" in the list of your unreasonable demands in order for the big bad company to take you seriously.

Mark "Beatlemaniac"

CS 445 Renamed

Administrators in the Math and Engineering faculties today unveiled an announcement pertaining to a renaming of CS 445, CS 645, ECE 451, and SE 463. These four course codes, inexplicably, all refer to the same course: Software Requirements Specification and Analysis. In an effort to make the course more appealing to prospective students, the name is being shortened to Soft Rex, Spex and Anal.

"We're really excited about the move", says the Dean of Courses. "Surveys have shown that students used to be turned off by the "specification" in the title of the course, driving them away from the four fun-filled months of specification the course entails. Now, they'll be enticed by the fresh, hip new title, and get to enjoy the crippling course work and huge printing costs!"

"It's a terrible, horrible idea," says a dejected fourth-year software student. "That course was barf, the kind of barf that barf-eating monsters wouldn't touch. 'Anal' is a fitting word in the title. That course is like being anal'd by a 120-page document. THREE times".

Note: because of all the meetings and votes the proposed name change took, University tuition will have a \$350 "value-added" charge.

SheenNine

House of Nerds



Dear Orcus...

The Demon Prince of the Undead answers your questions.

I'm a busy Demon Prince, but every now and then some foolish mortal calls upon me to ask a question. Much like this lost soul:

Dear Orcus, I'm a frosh CS student, and I was wondering: DO you have any tips on getting teh ladies? — Girl-less in UW.

I'm going to interpret "teh" as a misspelling of "ten" and answer from there. You are a CS student? Your aims are much too high. You'll be lucky if you get 0.678 ladies, let alone 10. However, if you are in a bargaining mood, I'm sure we can come up with an arrangement...

Hey, "Orcus" (if that *is* even your real name). Come on, do you really expect people to fall for this? Do you think you're fooling anybody? — Unbeliever.

DO NOT TEMPT ME!!! YOU BONES SHALL BE RIVEN FROM YOUR FLESH AND THAT'S NOT ALL I'LL *cough* Whoa, sorry about that. I get a little carried away sometimes. In answer to your question: Arts.

That is all for now. May you not be so snarky with your next letters.

Orcus, Demon Prince of the Undead

gridWORD

Hi all! This week we only got two submissions, but both were bang on. Congratulations to the winner of the *gridWORD* — Marg Doyon and Cristin Strong — for adding carbonation to a pool of Jello. Please pick up your C&D gift certificate as soon as possible. This week’s grid might be a little tricky as well, but I wish you the best of luck! This week’s *gridQUESTION*, in honour of all the birthdays that fall on November 4th, is: what do you want for your birthday?

Gridmaster Fox

Across

- 1 Biblical pre-Paul
- 5 WoW druid spell
- 8 Thing
- 12 Creek
- 14 Call out
- 16 Bowl-shaped constellation
- 17 Afternoon rest
- 18 Digimon hero and villain
- 19 Oil sands province
- 22 Spirited Away protagonist
- 23 Mother’s daughter (abbr.)
- 25 English naval hero Sir Francis
- 26 Rickard’s Red (ex.)
- 27 Step
- 29 Obtuse
- 30 Liquid, backwards
- 32 Playboy mansion pest
- 34 Hamilton university nickname
- 35 Hot internet-browsing animal?
- 36 OutKast’s Bombs over _____
- 37 Groove
- 38 Uncommon greeting
- 39 “A goal properly _____ halfway reached.” — Abraham Lincoln (2 wds.)
- 42 Hansel and Gretel antagonist
- 43 Expel
- 46 Drowned valley
- 47 Humped creature
- 49 Youth Golf Association (abbr.)
- 50 Medical response (abbr.)
- 51 Anna Karenina author
- 53 Norse fate
- 55 Sight-related
- 57 Mythical Latin warrior El _____
- 59 Made tough
- 60 Star Trek oracle
- 61 Witnessed
- 62 Lark
- 63 Hurtful window part?

Down

- 1 Hallowe’en candy container
- 2 Capture
- 3 Mythological muse of astronomy

- 4 Real estate
- 5 Terrestrial body
- 6 By now
- 7 Speed
- 8 Mobster slang for diamonds
- 9 Fight
- 10 Favourable regard
- 11 Average
- 13 Opposition of nay
- 15 U.S. investigative organ.
- 20 New York district
- 21 Rockland, MN airport code
- 24 Remote Russian locale
- 26 Salty fish
- 27 Secure storage devices
- 28 Bill and Ted’s mentor
- 30 American symbol
- 31 Examination of records
- 33 Negation
- 34 Serenity captain
- 36 To produce
- 38 Furry critter
- 40 Expensive white fur
- 41 Paper type
- 42 Evil before IBM?
- 44 Lizard
- 45 Renaissance mathematician, solver of cubic and quartic equations
- 47 Sicknesses
- 48 Winter hideaway
- 50 December 24th and 31st
- 51 Korean martial art ___ Kwon Do
- 52 Not me
- 54 Stick a fork in me, I’m _____
- 56 Vase
- 58 From CD to WAV

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