

TABLE OF CONTENTS

03

How do "snow days" work at UW? by Andie Kaiser

)5

Payment for on campus parking transitions to digital only by Justin Gec

07

Revolutionizing concussion detection: A UW alum's journey by Justin Gec

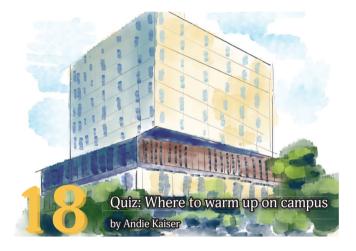
10

How to prepare for MCAT and LSAT by Christiano Choo and Humreet Sandhu



16

Exploring AI and the rise of Chat GPT by Carla Stocco



22

Recipe: Chimchurri steak salad by Ingrid Au





January crossword by Zoe Cushman



January 2025 University of Waterloo Waterloo, Ontario N2L 3GI P: 519.888.4048 | F: 519.884.7800 uwimprint.ca

Publisher: Andres Fuentes Executive Editor: Veronica Reiner Distribution: Eduardo Matzumiya Cover Art: Nina Mathew

Executive Team

Senior Editor (magazine) Andie Kaiser Senior Editor (website): Christiano Choo

Creative Team

Andrew Yang Arabella Hormillada Ashita Saxena Iqra Majeed Nina Mathew Paul Sherk Sandra Teppo Sarah An Tijana Krivokapic Imprint is the official student magazine of the University of Waterloo. It is an editorially independent magazine published by the Federation of Students, University of Waterloo, carrying on business as the Waterloo Undergraduate Student Association ("WUSA"), a corporation without share capital. Imprint is a member of the Ontario Community Newspaper Association (OCNA). Content is provided for general information, education and entertainment purposes only, and does not necessarily reflect the views of the Editorial Committee, WUSA, staff or advertisers. We welcome editorial submissions, articles, letters, photos and graphics (submissions) for publication in any edition of Imprint subject to terms and conditions for submissions, which are available upon request. Imprint does not guarantee that submissions will be published. Imprint reserves the right to approve and edit any submissions to be published. A submission will not be published if it is determined to be libelous or in contravention of Imprint's policies, code of ethics and journalistic standards. Imprint may reproduce content, including submissions, for commercial purposes in any format or medium. Imprint disclaims direct and indirect liability for reliance on or use of its content. Imprint is published monthly as a magazine and regularly online. Imprint reserves the right to screen, edit and refuse advertising. One copy per customer. Imprint [SSN 0706-7380] Imprint CDN Pub Mail Product Sales Agreement no. 40065422. Pub Mail Product Sales Agreement no. 40065422.

Imprint acknowledges that the University of Waterloo is situated on the traditional territories of the Attawandaron (Neutral), Anishnaabeg, and Haude-nosaunee Peoples. The University of Waterloo is situated on the Haldimand Tract, land promised to Six Nations, which includes six miles on each side of the Grand River. Therefore, Imprint recognizes and respects this land that it is situated upon.

How do "snow days" work at UW?

Andie Kaiser, Staff Writer

Should campus be closed due to the weather? That is the question asked by the team at UW that supervises extreme weather closures, led by associate vice-president, communications Nick Manning. With Waterloo's proximity to lake effect snowfall (and not to mention the ever-growing impacts of climate change) it's only natural that extreme weather would become an important part of university operations in the frigid winter months.

In order to ensure that the campus community isn't caught by surprise, Manning says that alongside his communications team, he is "always scanning" the forecast for potential weather threats. In the event of significant snowfall (or other extreme weather conditions), Manning's team connects with a wider group of people across campus to begin drafting potential plans. This group includes campus police, as well as the plant operations and grounds teams of each of UW's campuses.

"If for example [there's been] heavy snow or an ice storm that happens overnight, we get together by 5 a.m.

to review the information that we've been building up in anticipation around the forecast," Manning said of the process. This period of time is crucial, as the university aims to inform community members by 6 a.m. about whether campuses are open or closed for the day. Considerations taken into account are the amount of snowfall and ice (including that which is yet to come), as well as the capability of UW's resources to deal with the expected impacts.

Once this information has been compiled, Manning's team meets with the Provost, who would ultimately make a judgement call about whether to close campus. But Manning says that by this point, "often that will be an obvious decision to make."

While campus weather closures are often referred to simply as "snow days," Manning noted that snow is not necessarily the most dangerous kind of weather: "We're probably as attuned if not more attuned to the risk of ice, which often has much more significant consequences." Severe cold would be another factor, as well as extreme heat (although Manning notes that in his 10 years, he hasn't faced a scenario where that has been an issue). These conditions pose a threat because they are harder to address immediately, whereas snowfall on campus can sometimes be dealt with more easily by plant operations. "We're not sensitive to only small amounts of snow because we have great systems and processes in place to remove that stuff and to keep the campuses safe throughout the working day," Manning explained.



While it might seem rare that campus shuts down due to weather, Manning was clear that it does occur when the situation calls for a closure: "Everyone knows and likes to laugh about the fact that UW never closes, and so that's kind of the apocryphal joke... but of course that's not true. We have closed on a number of instances over the last ten years." Looking back on the past decade, though, Manning conceded: "There have been some times where a judgement gets made about 'can we operate the campus safely?' And I certainly can think of a couple times in the distant past now where I wish an alternative decision [had] been made."

Looking at more recent years, Manning noted the pandemic being one factor that has influenced closure decisions, as the university didn't have the same access to resources for clearing campus. In these cases, Manning said that closing was the "sensible and obvious decision." These kinds of decisions become much more complicated depending on where they fall in the semester, however. Due to the tightly-scheduled, year-round nature of UW's academic programming, one day of closures can have a big impact. Exam season poses particular difficulty to scheduling, as a campus closure would force any exams from that day to be postponed. "We don't want to have a snow day that knocks us into, say, a weekend exam," Manning added. And since so many students make plans to travel home after final exams, a snow day could pose much more complicated (and costly) threats during finals season. For Manning, this part of the equation is important to consider as well: "We've put the student experience in mind as well to say, 'what is the consequence of this?""



As for communicating decisions about weather closures, the university relies on channels like social media to alert the wider community. Manning explained that if the weather forecasts look uncertain, a post will usually be made advising folks to keep an eye on UW's social channels for a decision before 6 a.m. While on occasion an announcement might be made later than that, Manning expressed that his team tries to stick to the 6 a.m. deadline as they are "mindful" of both students and employees that regularly commute from further distances. He also mentioned the role that the Regroup Mobile app, UW's new emergency communications system, will play in communicating closures: "hopefully one of the benefits of that new emergency system is that we can use it for this type of thing and get [closure information] in people's hands as early as possible."

For more information on weather closures at UW, visit the university's "weather closing guidelines" online.

Payment for on campus parking transitions to digital only

Justin Gec, Staff Writer

Many students who stay up-to-date with their student email are already aware of the changes to campus parking, specifically regarding its payment, on the horizon for the winter 2025 term. For those of you who do not, it was announced that effective Jan. 20, the purchase of visitor parking passes or daily parking passes will transition from the "old-school" method of paying for parking at the machine to mobile payment of parking through the AMP mobile app or /website.

To gain more insight into the main reason or driving purpose behind this widespread change, Imprint sat down with Samantha Murray, change management advisor at UW and the interim associate director for the UW Sustainable Transportation office, playing a pivotal role during this transition. She shared that the main goal within the Sustainable Transportation office is to ensure "that sustainable transportation initiatives stay aligned with traditional goals while also navigating the bureaucratic landscape."

Murray has a rich history here at UW, having worked for more than a decade in various student-facing roles. Notably, Murray played a major role in the institutional shift to Microsoft 365 and the additional security measures now associated with accessing WatIAM accounts, such as two-factor authentication.

Imprint asked about the specifics of the sustainable transportation plan rolled out in May 2024, and whether it played a role in the organization's decision to transition to sole virtual payment through the AMP app. Murray shared that "the sustainable transportation plan is largely still in its infancy," putting an emphasis on receiving feedback from members of the UW community as far as travelling, not only to and from campus, but around campus. "With this plan being in its infancy, the next moves to be made are all contingent on the data we collect, the more legit and representative data we collect, the more well-informed decisions we can make," Murray said.

This is not the first time AMP has been used on

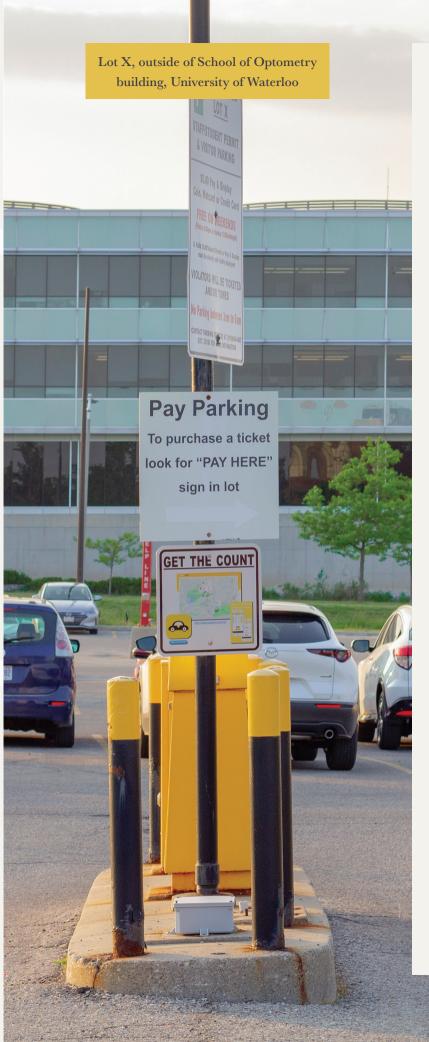
the UW campus. In past terms, some parking lots on campus were only able to be reserved through AMP. "The UW community is already at least somewhat familiar with the use of AMP, combining this with the overall positive feedback we received from members of the UW community, it seemed like an obvious decision for our transition to mobile payment to be conducted through AMP," Murray said.

The transition to the AMP app has "been in the works for a while now," Murray said, but did not provide a specific timeline.

When asked about the purpose of the transition to pure mobile payment, Murray said, "The use of AMP aligns with our overarching goal of sustainable transportation, it shows our commitment to leveraging technology to limit our campus carbon footprint." Murray added that the app "streamlines the payment experience, improving user experience, especially for those who tend to run late." App users can pay directly through the app, park, and get going without waiting in line for the payment machine or walking back and forth to drop off a pass at their car.

With this payment being mobile, the Sustainable Transportation was asked how they plan to accommodate those who do not have access to mobile devices. Murray shared that in this case, there are two options available. "AMP has a website where users can register their car, pick their desired parking lot, and their desired times, insert a payment method and they are good to go," Murray shared. Alternatively, if internet access is a barrier, Murray said that anyone is welcome to come to the Sustainable Transportation office where they can purchase a parking pass.

This raises the question of how does this affect fees or the tracking of individuals' parking status? Murray shared, "AMP is integrated with the software that Sustainable Transportation currently uses, through this, our parking officers will be able to run licence plates and ensure that individuals have paid the correct amount and are in the correct lot if they are not, a ticket will be issued." When asked if she had expectations or worries regarding



the AMP technology, she declined to comment.

As of spring 2024, parking rates across campus were raised – for instance, termly parking fees increased to \$235.61 from \$169.50, and hourly parking rates increased to \$3 from \$2. When asked about this, Murray insisted that this change was much needed and a long time coming. "The last time fees were raised at the UW was over 12 years ago; it was time for a much-needed change. Even with this raise in price, we are still on the lower end for campus parking as compared to other universities." For comparison, the Wilfrid Laurier University day pass costs \$12, the University of Guelph day pass ranges from \$7-\$21 depending on the lot, while the University of Toronto day pass can range between \$16-\$25 depending on the zone. UW day passes range between \$5-\$21, with the price varying between each lot.

In some cases, parking passes are sold out and many students are forced to pay for visitor parking daily or park elsewhere. "This is an issue that we are well aware of, but the reality is only a finite amount of parking is available on campus, the number of student parking permits available for sale are adjusted to match the availability of parking spots," Murray said. "Historically we use the data collected to predict parking needs." She said that the sustainable transportation team is in the process of improving this issue, "but can not provide a guaranteed or quick solution." In further carrying on the conversation on the lack of parking pass accommodations available, Murray said that "all the fines and fees we collect for infractions go directly back to the student body in the form of bursaries."

Users can download the AMP app on the Google Play Store, the Apple App Store, or register online. As of Jan. 20, the following visitor lots will be paid for solely through the AMP app: Physical Activities Centre (PAC), Student Life Centre (SLC); Lots B, C, CLV, J, M, N, Q, S, UWP, T, V, W, and X; Davis Centre/General Services Complex; Health Services; South Campus Hall; Toby Jenkins building; Village 1 lots; School of Pharmacy; and University Club.

Revolutionizing concussion detection – A UW alum's journey

Justin Gec, Staff Writer

Brain injuries have somewhat of a tainted history as far as dealing with their severity and identifying them effectively goes.

However, recently, especially in the world of sports, there has been some serious movement and headway made in not only dealing with the plethora of cases of brain injuries

but also detecting them correctly. In a multitude of instances, when an individual sustains a brain injury, the blanket term "concussion" is used to deem this a true injury, but with the brain being a vital component of everyday function, it begs the following questions: What exactly is a concussion? How does it come about? And what exactly does it mean to the individual who has sustained this injury?

To answer these preliminary questions and set the stage for the text to come, information regarding concussions and their effects will be drawn from the work of Elizabeth Sandel MD, who authored *Shaken Brain*, a piece of research writing that looks into the science behind concussions. According to Sandel, "A concussion, also known as a mild traumatic brain injury (mTBI), is an injury to the brain caused by a blow or jolt to the head — or a blow to the body that causes the head to move and the brain to shift rapidly inside the skull — that disrupts normal brain functioning."

Sandel explains that symptoms of a concussion can range widely from sensitivity to light, sound and or movement to severe headaches, lapses in memory, irritability, and hormonal changes. The severity and length of time that one will experience these symptoms depends on the grade of their concussion. It is a general medical practice that concussions are graded on a three-level tier with level one being a low-grade or mild concussion, level two being mid-grade to moderate and level three being high-grade to severe. Concussions are a prevalent injury that affects individuals on all levels. According to a study conducted by the Sports Medical Council of Alberta, on average each year, around 200,000 people in Canada are diagnosed with a concussion and about 20 per cent of all concussions reported are sustained by athletes, with young adults having the highest rate. Hockey, football, and rugby are the sports with the highest concussion report incident rates.

Sarah An

These statistics show that any individual playing high-contact sports is at a higher risk of sustaining a concussion. Kyle Dawdy, a former member of the varsity men's football team, shared, "Before we report for our first day of camp, we need to do a concussion baseline test — we are not allowed to participate in any team events until we do this test." He

is referring to the King-Devick test, which measures ocular, motor, visual, and cognitive function for concussion evaluation. "We just have to read a bunch of numbers that are on a sheet of paper. There are different levels and pages, and the numbers are ordered randomly across the pages," Dawdy said. "As we read, we are encouraged to go as fast as we can without making any mistakes, we are timed and then the time is recorded by the athletic therapists."

Breanna Hendrick, head athletic therapist for the UW's varsity football team, shared that the issue of concussions in football is much more prevalent than in other sports.

"Having a product like HeadFirst saliva testing providing objective results will make concussion detection and return to play a much more robust and results-based process."

- Breanna Hendrick, head athletic therapist of UW's varsity football team

"Throughout a season, I will deal with multiple instances of suspected concussions," she said. "When an athlete comes to me with concussion-like symptoms, or the athlete has sustained a severe blow to the head, I take them to a private, quiet area to perform a SCAT 6 test. Upon completion of the test, we will analyze the results, and the athlete will also perform a King-Devick test. We will then compare the results of this with their initial baseline test conducted before the season. Combining these two assessment tools with our professional judgement, we will then decide on whether the athlete can return to play."

The SCAT 6 test is a comprehensive sports concussion assessment tool that can be used to test an athlete for a concussion up to seven days after the injury. It helps medical professionals evaluate an athlete's cognitive, physical, and emotional symptoms and assists in making decisions regarding return-to-play protocols. When conducting an assessment using this tool, athletes are asked many questions and are supposed to answer them as honestly as possible. As discovered through discussion with Hendrick and former varsity football team member Dawdy, the tests used to determine and or diagnose a concussion within varsity athletics here at the UW are entirely reliant on tests and professional judgment, both considered to be quite subjective.

If you are anything like UW alum Andrew Cordssen-David, the idea of having an injury as severe and potentially

life-altering as a concussion being determined by subjective means is a compelling problem that needs to be addressed. Cordssen-David and his team are actively working to resolve this critical gap in the market for concussion detection. Cordssen-David's passion for entrepreneurship led him to enroll in the master of business, entrepreneurship, and technology (MBET) program at UW. Through the support of the MBET program, he assembled a team, including members affiliated with the UW, to develop a solution that provides athletes and athletic therapists with objective results to help in the detection of a concussion occurring following a

head-related incident.

Cordssen-David shared that dealing with concussions is something he is very familiar with. He played hockey for various years at a professional level, including with the Quebec Maritimes Junior Hockey League (QMJHL), the British Columbia Hockey League (BCHL), and the Ontario Junior Hockey League

(OJHL), until finally wrapping up his career with the Water-loo Warriors as a member of the varsity hockey team from 2018-2023. Cordssen-David shared that "concussions largely affected [his] hockey career," citing multiple occurrences where he experienced having to go through these subjective tests. He further explored this topic in an interview with CTV where he shared that in his exposure to concussions, "less than a handful were documented and [he]'d say probably around the same undocumented."

Although Cordssen-David did not directly relate these undocumented/untreated concussions to the reliability of these subjective tests, it is fair to assume that with subjective concussion testing being the only widely available and accepted testing mechanisms, they have failed him and many other athletes leading to their concussions to go undiagnosed. This, combined with other factors, pushed him to explore a more objective route to determine if an individual has sustained a concussion.

Through the assistance of MBET, Cordssen-David was able to build connections and a research team to look into the possibility of creating objective measures to determine if one has sustained a concussion. Through research, he and his team discovered that after a severe blow to the head or a traumatic brain injury, specific biomarkers in an individual's

be used to identify if this spike has occurred. This led to the creation of the company HeadFirst Inc.

Cordssen-David shared that the testing mechanism is very similar to the COVID-19 rapid tests that were prevalent during the pandemic. He explained, "When an athlete is suspected of having a concussion or exhibits concussion-like symptoms, they will undergo a saliva test. After the saliva is collected and applied to the device, it will provide a result: one line indicates a negative reading, while two lines signify that the individual's biomarkers have spiked, indicating a possible concussion."

Cordssen-David highlighted that a significant challenge in concussion testing in athletics is that due to their competitive nature, athletes may sometimes mislead athletic therapists to expedite their return to play. By introducing objective measures alongside the subjective concussion testing tools that have been used for decades, the likelihood of athletes returning to play prematurely could potentially be reduced. He added, "The goal of this product is not to completely replace subjective tests, as they still hold value, but rather to serve as an additional tool for healthcare professionals to make more informed decisions about whether a concussion has occurred."

Moreover, professionals in the athletic therapy field are

enthusiastic about the idea of an objective measure to help identify a concussion. Hendrick shared, "Although the tests being used require a high level of professional judgement, they are still subjective in nature. Having a product like HeadFirst saliva testing providing objective results will make concussion detection and return to play a much more robust and results-based process." Not only could the product assist athletic therapists and other healthcare professionals in their practice, it could also work to protect athletes from themselves.

HeadFirst is currently in the early stages of testing and attempting to receive approval for its product to hit the market. UW's athletics department is currently collaborating with HeadFirst on a study involving athletes from all sports to assess the feasibility of this approach. Cordssen-David said that moving forward, his goal is to not only have this product widely available to athletes but also have it as a tool available to anyone who is suspected of sustaining a concussion or traumatic brain injury. Although this product is in its early stages of development, it so far seems as if Cordssen-David and his team at HeadFirst are on the brink of being one of the many innovative and game-changing products to come out of the Velocity incubator here at UW.



How to prepare for MCAT and LSAT

Christiano Choo, Senior Editor Humreet Sandhu, Staff Writer

MCAT

ne of the most-dreaded parts of any pre-med's application process is the Medical College Admissions Test (endearingly shortened to the MCAT). It is a 7.5 hour long standardized, multiple choice, computer-based test that is administered every year by the American of American Medical Colleges (AAMC) and is used as part of the admissions process for the majority of medical schools. The content tested includes chemistry/physics, reading comprehension, biology, and psychology.

I was fortunate, or perhaps unfortunate, enough to be one of the more than 85,000 students that wrote it in 2024, having to pay the \$600 registration fee to do so. My preparation



was fairly unorthodox – I started my slow content review (memorizing flashcards and skimming the \$350 Ka-

plan textbooks for each subject) in the first year of university. Typically, most students will opt for a shortened, intense three month study schedule with content review much closer to the test date. Six months out from my test, I started ramping up my daily flashcards and aimed to have all 6,000 cards completed by three months out, so I could focus more on completing practice questions, practise full-length exams, and reading passages.

If you look online, most will advocate for three resources at the bare minimum: UWorld question bank (\$360), AAMC official prep materials (\$600), and Jack Westin Daily Critical

Analysis and Reasoning Skills Passages (free online). At the very least then, one could expect to pay just under \$2,000 to give themselves the best fighting chance.

I ended up receiving a 526 — a 100th percentile score — on my first attempt and I learned a lot throughout this process. There are some things I'm glad I did and some things I wish I knew before I started. First, I'm happy that I started content review early. Going over the same concepts over and over again really helped cement my understanding and the base it provided made it much easier to apply my knowledge to the questions.

Second, I wished I had planned better when booking my test date. I didn't know early testing dates sold out almost immediately when I booked mine. If you anticipate having to rewrite the MCAT, or even just want that safeguard, you have to stay extra vigilant when bookings for the next testing year open.

Third, and most importantly, leave the AAMC practice problems for the very last month and a half of your prep. These questions are the most representative of what you'll see on the real thing, and the scores you get on the full-length exams will likely be around your real score. Get all your practice and content gaps addressed first so you can better anticipate how well you'll do on the real thing.

To anyone planning to write the MCAT this year: best of luck! The process is undoubtedly challenging and time-consuming, but you're not alone — thousands have navigated it before you, and thousands will follow. The MCAT is a test of resilience as much as knowledge, and with careful preparation and perseverance, success is within reach.

Christiano Choo, Senior Editor

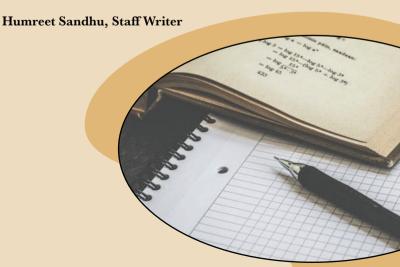
LSAT

The Law School Admission Test (LSAT) is probably one of the hardest parts of applying to law school. The test requires months of study and practice to achieve your dream score. The LSAT is a mandatory part of the law school application process in North America, and the purpose is to assess an applicant's critical reasoning, reading comprehension, and persuasive writing, all of which are important and necessary skills to thrive and survive law school. The test is administered by the Law School Admission Council and costs \$238. The LSAT is about three hours long with four 35-minute multiple choice test sections. There is a 10-minute break between the second and third section. The four sections currently consist of reading comprehension and logical reasoning.

My experience with LSAT was a long journey that took a lot of patience. I started studying in May 2023 and took the test in April 2024. I chose to take almost a year to study for it because I was working and doing school at the same time. To prepare for the test, I decided to take a course called 7Sage, which is an American LSAT course. The course provided me with a study schedule, learning modules, and practice tests to help me succeed. 7Sage had three main sections that helped me master the respective section of the LSAT. The first, logical reasoning, involves examining a given set of facts to deduce other facts or a conclusion. There are about 15 questions types in logical reasoning, including flaw questions, assumption questions, and strengthening/weakening questions. The second section was reading comprehension, which involves reading a passage and answering questions about it. The last section of the course was logic games, although this is no longer part of

the test as of August 2024.

By the end of September 2023, I completed the course and was now taking practice tests every week. I made sure to take all of the ones offered by the course. By the beginning of January 2024, I was scoring a 160 constantly, which is in the 75th percentile, but I wanted to aim for a 165 so I continued practicing until April. In the April 2024 LSAT, I ended up scoring a 167, which is in the 88th percentile. I was beyond satisfied with my score and didn't plan on taking the test ever again. I learned a lot through the study process and the biggest piece of advice I would give is to give yourself enough time to practice. I realized how much better I started doing once I kept taking more practice tests. This process can get mentally exhausting so it is important to give yourself some breaks along the way. Using a LSAT course worked out great for me, but it doesn't work for everyone and some test takers might want to get a tutor. Everyone learns in a different way, and it's important to take this into consideration when deciding how best to study for the LSAT. If you are preparing for the LSAT, I wish you well and hope you attain your dream score.



How to romanticize winter

Sophie Smith, Contributor

Enjoying the dreary, colder months can be challenging, but romanticizing your every day during this time of year can help keep you lower stress and find moments of joy. Through cultivating an atmosphere of coziness and comfort these tips can support you to savour the slowness of the winter season as much as possible.

1. Stay active

Personally, one of the first things I am tempted to let go from my daily routine during the winter months is fitness. As someone who prefers engaging in outdoor physical activity, keeping my body moving on colder, darker days can be challenging. However, I have learned that adjusting my fitness routine to these changing conditions is possible and vital to support my physical and mental health through all seasons. This will look different for everyone, but for me, physical activity during the winter consists of regular at-home yoga and frequent bundled up walks and slow runs. I have come to accept that although I can miss how different fitness looks for me in the summer, when there is more emphasis on tennis and beach volleyball, that does not mean I have to give up movement in the winter. Though it can be more restricting, there are still a myriad of possibilities to stay active in the winter including going to the gym, taking dance classes, or swimming at an indoor pool. Finding what works best for you can support a balanced, fulfilling winter routine.



2. Get outside

Though this can be the perfect time of year to stay under layers of blankets and enjoy more rest time, getting outside should remain a priority to maintain connectivity with others and keep the cabin fever at bay. Again, due to changing weather conditions, spending the same amount of time outdoors as you do in the warmer months may not be realistic, but with the right warm clothes, you can still enjoy getting fresh air everyday. You can also plan activities to get you out of the house like going thrifting or going to a museum.



3. Bring the outdoors in

For those of us in the north where winters tend to lack brightness and colour, filling your space with plants or flowers can help you feel connected to nature. Though you cannot change the dreary outside, you can make your indoor space as cozy and inviting as possible.

4. Lean into hobbies

For those of us who thrive most in summer, this less favourable time of year can often feel never ending. However, I have found that maintaining a consistent hobby or project during the winter can help redirect your focus and speed up the season. Personally, my go-tos include reading about one book a week, working on a crochet project, and trying new recipes in the kitchen. Activities like these can help highlight ways that you can still enjoy your free time in the winter and have you looking forward to doing something fun everyday.

6. Rewatch your favourite comfort show

Lastly, it's important to remember that the winter season can be difficult and it's okay to recognize that you might feel differently during this time of the year. Having tools to comfort yourself when you feel lonely or trapped can be very helpful. For me, this is often watching a comfort show or movie that I have seen a million times. Rewatching Gilmore Girls or Lilo and Stitch for the thousandth time will always help lift my mood or even just be a distraction from the difficulties of winter. Whether you prefer shows, movies, books, or another form of entertainment, letting yourself be soothed by your personal go-to comfort can be a helpful way to manage negative feelings about the winter season.



NOW ACCEPTING SUBMISSIONS



WOMEN CENTRE'S ANNUAL ZINE

ART * PHOTOGRAPHY * POETRY



26 Moore

DUE FEB 7 2025 Send to literature.wc@wusa.ca

wusa.ca/voices



Will artificial intelligence replace human workers?

Exploring AI and the rise of ChatGPT

Carla Stocco, Staff Writer

chatGPT, an artificial intelligence chatbot has become a well-known tool, enabling ideas, information and writing to be automatically generated by anyone with the hit of a button, and grew to prominence in November 2022. As per a Forbes article on the subject, ChatGPT rapidly gained traction on social media. In as little as five days, the artificial intelligence tool had attracted over onw million curious users.

UW has taken note of this technological advancement and the widespread popularity of its use. There is no denying that a system manufactured to spit out the answers or even the essay you ask it to write is not without ethical concerns and controversy. Having always enjoyed the written word, I found myself questioning whether the value of writing would be lost in a world where auto-generated pieces of writing is the new normal.

In search of answers, I reached out to Anindya Sen, professor of economics and acting executive director of the Waterloo Cybersecurity & Privacy Institute (CPI) at UW, to discuss the rise, direction, and role of ChatGPT and the launch of a new course on LEARN focused on teaching AI literacy skills for faculty, students, and staff.

Considering the role of AI: ready to replace human workers?

Sen expressed that while the quick evolution and accuracy of AI is remarkable, he feels that for many professions, AI presently serves to "enhance" rather than replace human workers. He offered a great example by calling to mind the work of radiologists, who work to detect anomalies in imaging results. When using AI in radiology, Sen expressed, "These machine learning models, they're very accurate and [can detect] anomalies the human eye [cannot]."

AI enables radiologists to become more productive, but AI "won't immediately replace radiologists." In his teaching, Sen believes in having students use AI responsibly to enhance their productivity. He mentioned that in the past, teachers were reluctant to allow the use of calculators, however in viewing how it enables students to make faster calculations, it has become an accepted tool.

Considering the ethical issues and caveats of AI tools

Unlike calculators, Sen expressed that the use of ChatGPT brings to mind many concerns, including data collection, how user data is stored, how individual privacy is impacted, and data scraping. Concerns

regarding cheating and plagiarism on written assignments is another key ethical dilemma surrounding use of AI. Sen described how "news organizations in Canada have launched a case against OpenAI with allegations that they're unfairly copying and scraping all their content to feed their algorithm." He went on to describe how The New York Times also opened a lawsuit against OpenAI for data scraping. He concludes that AI introduces concerns regarding intellectual property infringement. Overall, Sen states that while "there's nothing wrong in building a model based on these news articles, but [it requires] acknowledgment [of the source] and if there are other agencies who have already collected this information, they should be compensated." These are key ethical concerns he strongly insists require answers and consideration as we move forward into a world where AI and ChatGPT continue to expand.

Looking towards the future: UW's first AI course

Sen believes that the new AI course can help all students learn something new. For students not enrolled in math and engineering who may be less familiar with certain AI tools, he believes that the definitions in the course that describe AI, machine learning, and algorithms can help students gain a better understanding of such technologies. The course itself also dives into the unique ethical and social concerns surrounding AI. The course has been designed to enable thoughtful use and understanding of a tool that is sure to continue to expand its ability and usage. Sen shared that he will be speaking with faculty deans at UW this January 2025, "to see how [they] can make this course available to all students and [make it] something they can take for course credit."

Where AI falls short: a glimpse into the power of human emotion and experience

Sen highlights the benefits and implications of AI use, however, when it comes specifically to the

field of writing, another prominent figure at UW has done research into the realm of music writing and what makes certain lyrics and songs so meaningful to listeners.

Paul Thagard, cognitive scientist, full-time writer, and distinguished professor emeritus of philosophy at UW, looked into why so many find comfort in sad songs. Taylor Swift is well-known for her heartbreak ballads and for many who find solace in her tunes, it is the relatability and the authenticity in her lyrics that make fans feel understood. Thagard emphasizes, "What makes the sad songs so powerful for us is that they engage our emotions." Given sadness is a universal human emotion we experience often enough, music can enable us to work through such emotions. In a chapter of his new book, Dreams, Jokes and Songs: How the Brain Builds Consciousness, Thagard discusses Swift's hit song, All Too Well, and the powerful range of emotions that are expressed in the ballad, as being key to its fan-favourite status. Thagard's work and research highlights that AI can write lyrics and poetry but fails to authentically replicate the human capability in one area that makes a song truly meaningful: emotions.

ChatGPT is a tool, and as our world continually advances in the realm of technology, there are bound to be emerging technologies that bring up ethical concerns and controversial uses. Technology is an amazing part of our lives, enabling and advancing society to incredible heights. It is key that even as our world progresses and revolutionizes itself, we remember that human communication, which is thoughtful, present, and honest, remains more impactful than generic, inputted, and reused writing ever will be. There will never be a voice exactly like yours. Instead of asking ChatGPT to write your essay in its voice, perhaps consider writing it from your perspective: human, real, and encompassing truths, experiences, and emotions that AI will never match.

Quiz: Where to warm up on campus

Andie Kaiser, Senior Editor

Winter term is now underway, and whether you're working a co-op job or getting back into the classroom, it's safe to bet that you'll be searching for some cozy spots to warm up during the week. Well look no further than this quiz, where we'll give you some suggestions about where (on campus) you can huddle up between classes or on your lunch break.

Answer the questions, tally up your answers, and enjoy!

1. Where are you located most often? (For classes or work)

- a. Arts Quad/environment buildings
- b. Around the university colleges
- c. In busy areas (ie. SLC, DC)

2. How much time do you have between classes/for lunch?

- a. A solid 30 minutes
- b. Bold of you to assume I have time for anything other than school/work
- c. An hour or more

3. Do you like being able to grab food while studying?

- a. It's nice, but not a necessity
- b. Not really
- c. It's a must!

4. Are you looking for a spot to be social?

- a. Not sure yet
- b. No, I need some me time!
- c. Yes

5. How are you with noise?

- a. Quiet chatter is okay, but nothing too crazy
- b. I like having a (relatively) controlled space
- c. Fine by me

6. Your favourite thing about winter?

- a. Getting a hot drink
- b. Curling up with a good book
- c. Enjoying comfort food

7. Do you typically spend money during your breaks?

- a. I love a little treat
- b. I'm trying to avoid spending
- c. I usually need to get a meal



Mostly a - Visit a cafe

If you answered mostly a, then you'll definitely want to check out one of the cafes on (or near) campus. Offering a variety of hot drinks during these cold months, we wouldn't be surprised if one of these spots becomes your new go-to place to relax. If you're located in the St. Jerome's/university colleges area, why not check out the Funcken Cafe? Located in the same building as the St. Jerome's library, this cozy space offers comfortable booths and tables that can be used for studying or simply chatting with a friend. You can also grab pastries, bagel sandwiches, and many different drinks. If you're closer to the heart of campus, maybe try the EV3 cafe. It offers a spacious place to eat/socialize, with lots of windows to let the winter sunshine in. The EV3 cafe has lots on offer in terms of food and drink, so be sure to check out their menu before you visit! If you want to travel further afield (or, if you're located near the engineering buildings), Williams Cafe is always a classic student favourite. Bring your laptop to work, or just settle in with a nice hot meal (I'm partial to the gourmet mac 'n cheese)!





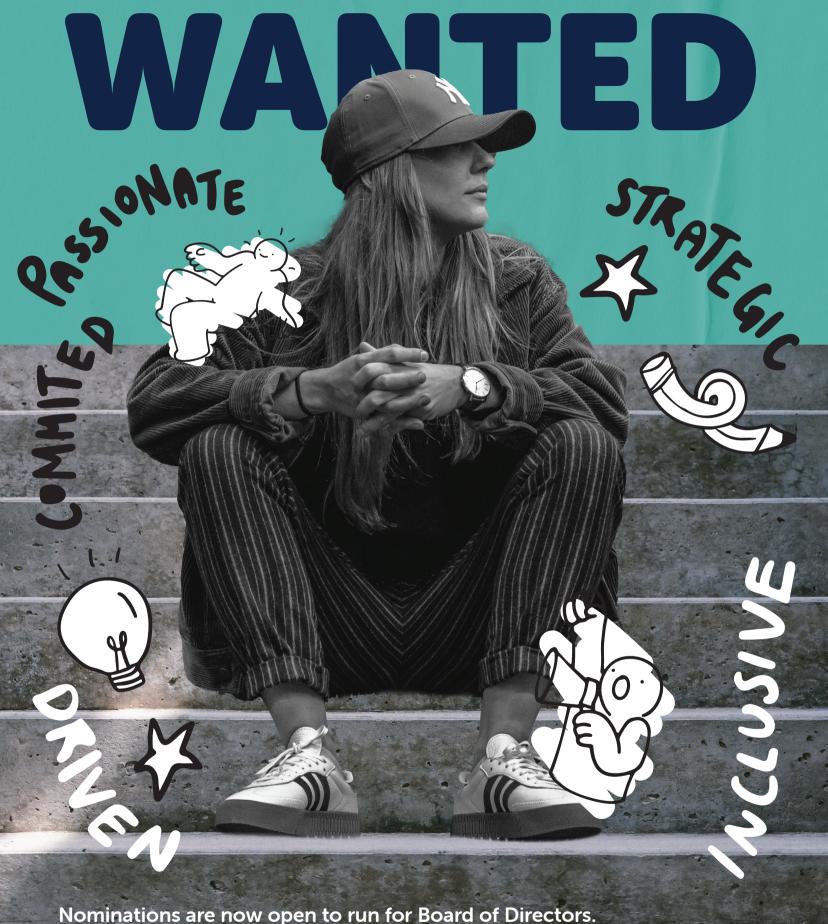
Mostly b - Head to a library

It sounds like you're a fan of the classics – by which I mean one of UW's libraries. Sometimes there's nothing better than coming in from the cold to a warm, studious space. Of course, you're likely already familiar with the big libraries on campus like Dana Porter (DP) and the DC library (I must say, there is something very cozy about being on one of the upper floors of DP and looking out at the snowy landscape below). But if you're looking for a new place to get some work done (or just relax in peace and quiet), you could check out the libraries at the university colleges. The St. Jerome's University Library, the Lusi Wong Library at Renison, and the Milton Good Library at Conrad Grebel are all located just across Laurel Creek, and they all have group study rooms available for booking. If you want a library that has a smaller, more intimate feeling, any of these could be just perfect for you!

Mostly c - Try a cafeteria

If most of your answers were c, you'll probably want to warm up by having a good bite to eat at one of the cafeterias on campus. Whether you're looking to hang out with friends or you just want to decompress in a more lively space on campus, any of these options will be up your alley. Naturally, SLC is right at the heart of campus and offers tons of tables to both eat and study at. There are lots of food options during the week, ranging in price. Currently in the SLC Student Lounge (which is off to the right and downstairs if you enter near the Tim Hortons) is SmashBites, which offers burgers and fries with various options for different dietary needs. The lounge itself also acts as a space to gather, with many stools, chairs and tables available. Other cafeterias on campus include the DC cafeteria, the Modern Languages Cafeteria, and the Math Coffee and Donut Shop on the third floor of MC. With so many options in each of these spaces, you'll just have to check them out more than once.





Nominations are now open to run for Board of Directors.

Set the strategy of your student association, guide the financial, legal, and contractual affairs, and represent the undergraduates among stakeholders.

wusa.ca/elections

WATERLOO UNDERGRADUATE

STUDENT ASSOCIATION

How Canada's new immigration policies will affect international students and universities this year

Christiano Choo, Staff Writer

The Canadian government has announced several immigration policy changes relating to international students leading up to 2025, most notably an increase in the cost-of-living requirements for applicants from \$10,000 to \$20,645 and a further 10 per cent reduction from 485,000 permits in 2024 to 437,000 in 2025.

These changes have come about as a result of the country's broader desire to "better [align] temporary and permanent resident immigration levels with community capacity." Along with a 21 per cent reduction of permanent residents being accepted into the country in 2025, this would hopefully alleviate some of the long-standing strain on housing, healthcare and other social services.

In a December 2023 news conference, Marc Miller, Minister of Immigration, Refugees, and Citizenship, gives additional reasons for his decision. In capping the number of permits, he says the country will be more poised to crack down on private, for-profit "puppy mills that are just churning out diplomas" that have historically engaged in predatory recruitment processes with "recruiting students with false promises of in-class instruction and guaranteed housing." This reality has come about mostly from the freeze on domestic tuition in place since 2018, which has encouraged many institutions to rely heavily on international student fees to make up for revenue shortfalls. Yet, around 70 per cent of programs offered in public colleges, which account for a disproportionately high share of international students, are ineligible for post-graduation work permits. This leaves many international graduates in difficult circumstances where they cannot find work — often after spending close to \$150,000 for an undergraduate degree — and are forced to return to their home country.

Despite these reported benefits, the capping of study permits and other changes in PR and temporary resident pathways have come under heavy criticism from groups representing post-secondary institutions. Many say that they feel the government is not providing the necessary support to assist them with the dire financial consequences that these policies are likely to create. Miller addressed these sentiments by ultimately holding firm in his decision: "The federal government has a role [in providing assistance], balance sheets can't be determined by whether [schools] get international students or not. It's a luxury. It's a privilege and not necessarily a right." He further states that provinces need to "step up" to work with schools to ensure the sustainability of the post-secondary sector. This is perhaps most relevant for Ontario, as the province has historically spent less money on post-secondary education than

any other province.

Nevertheless, it is clear that many universities and colleges are facing an unprecedented financial crisis. "It's been the international students that have kept [our university system] afloat," says Alex Usher, president of Higher Education Strategy Associates. According to Steve Orsini, president of the Council of Ontario Universities, 10 Ontario universities projected losses of \$600 million in 2024-2025. Colleges are in similar rough waters, with Seneca Polytechnic being forced to temporarily close one of its campuses and Mohawk College projecting a \$50 million deficit for 2025.

The University of Waterloo is among those feeling the impact of the projected drop in international student enrolment. According to ApplyBoard, an online international student recruitment portal, the cap also appears to have discouraged many from pursuing a Canadian education in general — Canada has since fallen to third in terms of desirability, behind the U.S. and the United Kingdom. As of November 2024, approved permits for international students are down by almost one-third for UW as compared to the same time in 2023.

During the most recent Senate and Board of Governors meetings, it was calculated that in the absence of constraint measures, UW could expect a deficit of \$75 million. Budgetary adjustments to make up for this shortfall include a massive reduction in university spending across several university initiatives, services and course offerings.

The impact of these policies on our local international student body will continue to be monitored. However, support is available to help students navigate the immigration system, including access to free immigration services through Waterloo Legal Services. This initiative is supported by a team that includes seven Regulated Canadian Immigration Consultants who are dedicated to providing guidance and assistance to international students.

While the federal government's stance aims to address systemic issues such as housing shortages and predatory recruitment, the ripple effects on universities, students and local economies are undeniable. For many institutions, the reliance on international student revenue has become a financial lifeline, and the sudden policy shifts have left them scrambling for alternatives. As the debate continues, it is crucial for all stakeholders — government, institutions, and provinces — to collaborate and find innovative solutions that ensure equitable access to education while safeguarding the long-term viability of the sector.

Chimichurri Steak Salad

Ingrid Au, Contributor

appy New Year! Whether you felt freshly renewed or hungover on New Year's Day, I hope you had a great start to this new chapter. As we turn over a new leaf, so should our eating habits, and what better way to start with a delicate salad?

Tools

Salad bowl

A small bowl

Cooking pan

Optional: Food processor

Ingredients

Chimichurri Dressing/Salad:

Stored bought salad mix

1/3 cup of olive oil

Steak: 2 tbsp of white vinegar

2 cloves of garlic, finely diced

½ cup of finely chopped parsley 1 whole steak (around 180-200g

1/4 tsp of dried oregano

1/4 tsp of chilli flakes

1/4 tsp of smoked paprika

1/2 tsp of salt

1 tbsp of olive oil

and about 1 inch steak)

1/4 tsp of salt

½ tsp of black pepper

Optional: Rosemary (2-3 sprigs)



Chimichurri Dressing

If you are using a food processor, you can throw all the ingredients into the processor and blend into a fine paste. Alternatively, manually chopping your garlic and parsley will provide more texture to your dressing. The same process applies by combining all the ingredients together in a small bowl.

Steak (Medium Rare)

For medium rare, cook each side of the steak for 3-4 minutes at high heat. For medium, cook each side for 4-6 minutes. If you have a thermometer, a medium rare steak should reach 130F and medium steak at 140F. If you do not have a thermometer, fear not, you can always cut open the steak to check its consistency. If it is not to your liking, feel free to throw it back into a pan for another minute.

Slice the steak and assemble the salad mix, steak and Chimichurri dressing. Enjoy!

January crossword

Zoe Cushman, Contributor

ACROSS

- 1 Clutch
- 6 Unwanted emails
- 10 Decked out (in)
- 14 Hearing-related
- 15 Buddhist forehead marking
- 16 Online marketplace app with orange branding
- 17 Robotic or machine-based, as an original character
- 18 Close by
- 19 O'Chestang of Dropout
- 20 Casual greeting
- 21 Fine point
- 23 Working parents' need
- 26 Team
- 30 Soak (up)
- 31 Dubai country (abbreviated)
- 32 Music channel hosts (abbreviated)
- 34 American gun lobby organization (abbreviated)
- 35 Cooks over boiling water
- 37 Couatl guide in D&D module Tomb of Annihilation
- 38 "C'mon, be ___!"
- 39 International creative event happening January 20th-26th this year (three words)
- 42 Harsh criticism
- 43 Profile introduction on social media
- 44 Gambler's tactic
- 46 Pull
- 47 Dashed
- 48 Big ___, California
- 49 National vehicle development organization (abbreviated)
- 50 Makes cat noises
- 52 Stand guard (two words)
- 55 Rise
- 57 Egg cells
- 58 Diner sandwiches (abbreviated)
- 61 Icelandic epic
- 62 Foaming at the mouth
- 65 Sunrise direction
- 66 What you eat
- 67 Exploits, as an opportunity
- 68 Ella who sang "Comeback"
- 69 "The Neverending Story" author
- 70 Winter driving hazard

1	2	3	4	5		6	7	8	9		10	11	12	13
14						15					16			
17	\top		\top	\top		18					19		\top	
		20				21				22				
23	24		+		25					26	T	27	28	29
30				31				32	33			34		
35			36				37				38			
	39		\dagger	+		40				41			+	
42					43				44					45
46				47				48		T		49		
50			51			52	53			\dagger	54			
			55		56					57	T			
58	59	60			61					62	\top		63	64
65					66					67	\dagger			
68		+			69					70	+			

DOWN

- 1 A meeting of whale ships
- 2 Regret
- 3 Island chain
- 4 Saharan region
- 5 Feign ignorance
- 6 Ice cream treat
- 7 Evelyn of silent film
- 8 "Fiddler on the Roof" location
- 9 The Tale of ___ & Moa (upcoming action
- 10 Keyboard shortcut to remove formatting in Word
- 11 CrossCode protagonist
- 12 Sound booster
- 13 "Obviously!"
- 22 Orbiting research station (abbreviated)
- 23 HTML formatting language
- 24 Adhesive that comes from a 'gun' (two words)
- 25 Winter melon
- 27 Not tasty
- 28 Biblical language

- 29 Lentil dish
- 33 "___", Super Star! (two words)
- 36 All good (two words)
- 37 Self-importance
- 38 "Bang!" band
- 40 Networking website
- 41 Catchy tunes
- 42 Transmasc (abbreviated)
- 45 Derisive call
- 47 Blog feed format
- $48\ Tranquilize$
- 51 Squander, as potential
- 53 Finished
- 54 Be of use
- 56 Surrender
- 58 Spelling
- competition
- 59 Set down
- 60 Original Dungeons & Dragons
- publisher
- 63 Mike & ___ (chewy candy)
- 64 System that moves clocks
- forward or back an hour (abbreviated)





IMIEN'S HOCKEY

JANUARY 17

CIF ARENA



W/W VOLIEYBALL

JANUARY 25

(VAV) 2:00 PRVI (RVI) 4:00 PRVI TOTZEKE COURT (PAC)





WOMEN'S HOCKEY

JANUARY 26

2:30 PTV CIF ARENA



W/IVI BASKETBALL

JANUARY 29

(WV) 6:00 PRVI (RVI) 8:00 PRVI TOTZEK E COURT (PAC)

FREE ADMISSION FOR ALL UWATERLOO STUDENTS WITH THEIR WATCARD!

GOWARRIORSGO.CA/TICKETS













