

THE MONOGRAPH TEAM





Editors In-Chief Purvi Mahida, 2T6 Vivian Hang, 2T7



2T5 Representative
Said Aoude



2T6 Representative TBD!



2T7 Representative Sara Ronni Abjari



2T8 Representative TBD!

Cover Art Vivian Hang

EDITOR'S ADDRESS

As another summer comes to an end, we're excited to welcome you all to a new academic year filled with opportunities, challenges, and growth. To our incoming 2T8s, a warm welcome to the Leslie Dan Faculty of Pharmacy! We hope you enjoyed your orientation week and are ready to carry that energy throughout the year. To our returning 2T7s and 2T6s, welcome back! And to our 2T5s, we wish you the best of luck on your APPE rotations.

We are Purvi Mahida (2T6), and Vivian Hang (2T7), and we are thrilled to be your Monograph co-editors for the 2024/25 school year. Our goal is to make the Monograph a vibrant platform that captures the spirit of our faculty and student body. Whether you're new to our faculty or returning, we hope this issue brings you as much joy as it did for us to create it.

This pre-issue is packed with everything you need to kickstart the school year. From UPS member introductions in "Who's Who" section, club spotlights and heartfelt messages from our newly elected UPS President Mona Mollaeizadeh, Vice President Rehan Saeed, and incoming first-year Zaneb Chaudhry (2T8). You'll also find a farewell to our recent graduate Al-Amin Ahamed (2T4). Plus, don't miss our everpopular "Anti-Calendars," offering insider information on your upcoming courses.

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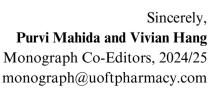
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As co-editors, we are excited to use the Monograph as a space to showcase student voices, unify our community, and provide valuable resources. If you're interested in contributing, whether through writing, sharing ideas for content, or joining our layout team, please don't hesitate to reach out to us or your class representatives. Let's make this school year one to remember!





HAPPY PHARMACY NEW YEAR!!

There are several dates in the calendar that are monumental for us students – birthdays, holiday season, and maybe even Halloween. But the first week of September may outshine them all, it's when us students return to our stomping grounds, to an exciting new school year!

To our returning cohorts - 2T7/2T6/2T5 - we hope you all are rejuvenated and excited to learn from the world of Pharmacy, especially after your exciting EPE/APPE placements over the summer months. We hope to see similar, levels of enthusiasm and excitement to be on campus as we did over the last year – especially considering how refreshed our own pharmacy building is!

To our 2T8s - on behalf of the Undergraduate Pharmacy Society (UPS), we are thrilled to welcome you to Leslie Dan Faculty of Pharmacy and to our Phamily!! Congratulations on taking the first step into an amazing profession that is both rewarding and impactful.

As you embark on this exciting journey, know that you are joining a community dedicated to improving healthcare and making a difference in patients' lives. The next four years will be filled with learning, growth, and countless opportunities to achieve your goals and dreams. As well as making amazing memories and meeting some of your closest friends!

To both our new and returning students: we can't wait to see you embrace new challenges, and accomplish incredible things! Together, we'll celebrate successes, and navigate the path to becoming trusted healthcare professionals and active members of the Faculty of Pharmacy. Welcome to the UPS Phamily!

Here's to a fantastic journey ahead!

Warmest regards,

Mona Mollaeizadeh and Rehan Saeed

2024-2025 President and Vice-President Undergraduate Pharmacy Society (UPS) Leslie Dan Faculty of Pharmacy University of Toronto



LETTER TO THE MONOGRAPH: 2T8

As I begin my journey as an incoming Doctor of Pharmacy student at the Leslie Dan Faculty of Pharmacy at the University of Toronto, I am both excited and honoured to be part of such a prestigious program.

My passion for pharmacy began long before my formal education, as I began working in the field as early as 17 years old. My first job was as an OTC Pharmacy Associate, and it was here that I developed a foundational appreciation for patient care and the essential role pharmacists play in improving community health. The experience was formative, teaching me the importance of communication, empathy, and attention to detail in providing the best possible service to patients.

I then completed my undergraduate degree at Ontario Tech University, where I specialized in Life Science within the Biological Sciences program. Throughout my time there, courses like biochemistry and pharmacology further solidified my love for pharmacy. I found myself drawn to subjects that explored human biology, disease mechanisms, and the science behind medication. As I gained more knowledge, I became increasingly excited about the prospect of applying this understanding to real-world scenarios, helping people manage their health through effective and precise medication therapies.

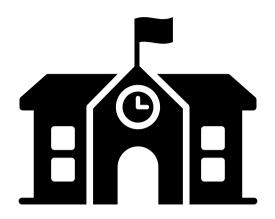


Perhaps one of the most pivotal moments in my academic journey occurred while conducting my final year research project, which investigated the gene-silencing activity of chemically modified saRNA complexes using luciferase assays. This experience was not only fascinating but also deeply meaningful. It piqued my interest in pharmacology, particularly in how gene regulation and therapy can be utilized to develop new and innovative treatments for diseases. The hands-on research provided me with a greater appreciation for the complexities of drug development and pharmacotherapy, reinforcing my desire to pursue a career in a sector where I can combine both scientific inquiry and patient care.

Looking ahead, I am eager to dive into the PharmD program at the University of Toronto, where I hope to gain more in-depth knowledge of pharmacology, drug management, and the role of pharmacists in modern healthcare. I am particularly excited to learn from faculty members who are leaders in the field and to collaborate with my peers, who share my passions. In the coming years, I hope to not only build on my existing experience but also develop new skills and insights that will allow me to make a meaningful impact as a healthcare professional. Pharmacy is an ever-evolving field, and I am committed to staying on the cutting edge of new developments in medication and treatment protocols to better serve my community. It is an especially exciting time to be entering the field, and I look forward to the challenges and rewards that lie ahead as I work towards becoming a pharmacist.

Zaneb Chaudhry

LETTER TO THE MONOGRAPH: 2T4



Hello 2T8s, congratulations and welcome to the Leslie Dan Faculty of Pharmacy. I know quite well what it took to get here, so give yourself a pat on the back for a well-deserved admission to the leading pharmacy school in Canada. You may start to slowly realize that your journey is only just starting and will continue for a lifetime. The next four years may sound daunting, but take it from a recent graduate that started during the COVID-19 pandemic; this opportunity will be over quicker than you can process a prescription.

Candidly speaking, you will be challenged a lot, and I mean A LOT. But that is okay, because you have each other as support to overcome all that may come your way. Nonetheless, this experience will also be filled with incredible memories, phriends, and experiences. You now find yourself joining an allied force of healthcare professionals that have been leaders in patient care and regarded as the most accessible healthcare provider in Canada. Since the COVID-19 pandemic, our scope of practice has expanded at an unprecedented rate and continues to do so. I am envious of all of you, as there truly is no better time to be entering this profession than now.

Now, let's talk facts. Some of you may be super familiar with the pharmacy landscape and already have an idea of what you want to do or pursue. If you were like me, you are probably entering the program like a deer in headlights, overwhelmed with all that may come. Regardless of who you are or what pharmacy experience you may or may not bring from the start, I encourage you to immerse yourself as much as you can in this program. You will be surprised to learn of all the innovative and growing pathways you can pursue with a PharmD aside from the traditional pharmacist role in a hospital or retail pharmacy. Pharmacists can work in government, private industry, informatics, public health, public policy, and so much more.

Do not limit yourself in this program; take advantage of all that you can experience and really get your money's worth. Join clubs, consider student government, checkout the PharmD-MBA program, what is the global studies certificate? What electives are offered in your third year? These are all things you can and should consider earlier rather than later. That being said, take what you want out of this experience. This program is not a race; it is a marathon for the long haul, so be sure to take your time and settle in the way that works best for you.

My last piece of advice. Stop this competition between peers BS that has plagued the life sciences community. You are all colleagues, future healthcare professionals; WORK TOGETHER! Have each other's backs because YOU WILL need that support in the coming years. Make phriends, make connections, and build your network because these are partnerships that will help you when you least expect it.

As I bid you all adieu, congratulations again for your STUNNING achievement of getting into this extremely competitive program. I look forward to welcoming you all as pharmacists into the profession very soon and have no doubt that you will all do great things. Remember, you are never alone; don't be a stranger, and always feel free to reach out if you need help (@alamin225 on Instagram).

Take care and good luck!

Slay,



Al-Amin Ahamed



Adam Da Costa Gomes, 2T5 UPS Past President pastpres@uoftpharmacy.com

Role: My role is to serve as an advisor to help guide the team through various challenges.

Talk to me about: Pokémon, RuPaul's Drag Race, living in the city Advice for my first-year self: Take it a day at a time, breathe, and always remember that your health & wellbeing comes before the degree. It will be stressful but keep your wellness as the main priority!



Mona Mollaeizadeh, 2T6 UPS President ups@uoftpharmacy.com

Role: As UPS president, I oversee the UPS council and the many student activities that it brings to our faculty. As a council, we strive to improve the social, academic, and professional life of our Faculty.

Talk to me about: Travel, Hot sauce, My plant children Advice for my first-year self: It might be hard at first but you'll get through it. I believe in you.



Rehan Saeed, 2T6
UPS Vice President
ups@uoftpharmacy.com

Role: I work alongside the president to ensure that we all represent the study body to the best of our ability.

Talk to me about: The Premier League, The Jim, Jim Halpert,

Favourite Toronto Foodspots:D

Advice for my first-year self: Experiment! try new extracurriculars, learning styles, and talking to new people - half the fun is learning something new about yourself!





Miral Bunha, 2T7
Executive Secretary

secretary@uoftpharmacy.com

Role: As the UPS secretary, I will be in charge of inputting UPS points that you collect throughout the year, as well as closely interacting with the president and vice president to set up meetings, and other logistics and meetings.

Talk to me about: Books, spicy foods, my notion, & concerts Advice for my first-year self: Try to enjoy your year even if it feels overwhelming, don't try to rush it away.

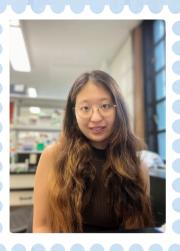


Amira Bouchema, 2T6 Sr. Finance Director finance@uoftpharmacy.com

Role: We are responsible for maintaining all the budgets to make sure that the events throughout the year are well funded.

Talk to me about: Honkaku Mystery Novels, cats, hiking, anime, poetry and cool food spots! (Bonus is how to make your matcha latte rock!)

Advice for my first-year self: One step at the time -- it's what gets you to the light



Maggie Zhang, 2T7
Jr. Finance Director
finance@uoftpharmacy.com

Role: I work with my co-director to maintain and optimize the UPS budget to ensure that all student activities are funded.

Talk to me about: SKI SKI SKI and travelling

Advice for my first-year self: School isn't everything. Get out there and start building those connections!



Jessica Amiana, 2T6
Sr. External Affairs Director external@uoftpharmacy.com

Role: I work with Freddie to recruit, organize, and plan events with sponsors including Lunch and Learns, the Community Outreach Fair, and etc.

Talk to me about: Music, books, cats, places to go in Ontario Advice for my first-year self: There's more to life than school!



Freddie Yuan, 2T7
Jr. External Affairs Director external@uoftpharmacy.com

Role: Responsibilities include collaborating with CBS to host one blood drive per semester, organizing a community outreach fair with CU advertising, supporting the Senior External as needed, and following room booking protocols by consulting the UPS secretary if unsure. **Talk to me about:** Trying new restaurants, cooking new dishes, anime, working out!

Advice for my first-year self: Make as many friends as you can and get out there! Enjoy the City of Toronto!



Preston Chan, 2T6
Events Co-Director
events@uoftpharmacy.com

Role: We get to plan fun events that happen throughout the year including the boat cruise, Phollies, and semi-formal. We hope you look forward to them all!

Talk to me about: Food, sports, photography, and Vancouver (born and raised!)

Advice for my first-year self: Pharmacy school can be hard but try your best to make time for yourself and your friends!





Victoria Jamieson, 2T7
Events Co-Director
events@uoftpharmacy.com

Role: I work with Preston to plan exciting events including the boat cruise, Phollies, semi-formal and so much more! We want to make everyone's experience in pharmacy to be unforgettable!

Talk to me about: Live music, cheese, tattoos & heights

Advice for my first-year self: Don't wish your time away, find the joy in your current experience. it'll be over before you know it - embrace the journey!!



Sheena Ye, 2T6 Marketing Co-Director marketing@uoftpharmacy.com

Role: Emily and I make funky graphics to promote school events!:)

Talk to me about: Coffee shops, spin class, books, love island USA season 6

Advice for my first-year self: Don't play iPad games in class and get an app blocker so you also don't go on Instagram



Emily Wang, 2T7 Marketing Co-Director marketing@uoftpharmacy.com

Role: Along with Sheena, my role is to manage our socials and advertise all the amazing events and initiatives that UPS organizes during the year!

Talk to me about: Books, plants, skincare/makeup, food recs!

Advice for my first-year self: Though it may be daunting, try to put yourself out there and say yes to as much as you can!



Julia Ioannou, 2T6 Sr. Athletics Director athletics@uoftpharmacy.com

Role: I'm responsible for organizing all intramural sports for the pharmacy faculty. I also work with the Jr. Athletics Director to organize athletic events for the faculty like the curling bonspiel and soccer cup!

Talk to me about: Cats, where you get your cute clothes from, your favourite musician or recent vacation

Advice for my first-year self: Get out of your comfort zone! You'll never imagine all the amazing friends you'll meet and memories you'll make by trying new things:)



Samman Ali, 2T7 Jr. Athletics Director athletics@uoftpharmacv.com

Role: I work with Julia to plan and organize fun athletic events such as the tug of war, curling bonspiel, and intramurals. My role is to also maintain the athletics bulletin board.

Talk to me about: About absolutely anything I love a good conversation

Advice for my first-year self: It will never be that serious! So don't stress too much and just put in 100% of your effort and trust yourself. Everything else will fall in place.



Purvi Mahida, 2T6 Monograph Co-Editor monograph@uoftpharmacy.com

Role: As Co-editor with Vivian, we plan, edit, and publish the student newsletter with support from our executive and layout teams. The Monograph features student articles, artwork, puzzles, and more, bringing you engaging content all year long.

Talk to me about: Food, new cafes, travel and photography

Advice for my first-year self: Don't be afraid to step out of your comfort

zone and take risks—embrace new experiences, meet new people, and
take every opportunity that comes your way. This time will pass
quickly, so make the most of it:)



Vivian Hang, 2T7 Monograph Co-Editor monograph@uoftpharmacy.com

Role: As co-editor, we are responsible for creating and publishing the student newsletter which includes exciting articles, recipes, and more

Talk to me about: Food, kdramas, musicals, travel, embroidery **Advice for my first-year self:** The time will fly by, so make the most of it! The journey may be scary and hard, but be confident and believe in yourself - Remember, we are all so proud of you



Jenna Zhang, 2T6 Pharmakon Co-Editor pharmakon@uoftpharmacy.com

Role: As co-editor of Pharmakon, we work to put together a yearbook for pharmacy students to preserve everyone's memories together with their friends! We also have amazing photographers and designers that help capture events throughout the year.

Talk to me about: Cats, any show really, horror movies!

Advice for my first-year self: Join all the clubs you want to join!

Classes might be intimidating, but just try your best and you'll be fine.





Madeleine Yee, 2T6 Pharmakon Co-Editor pharmakon@uoftpharmacy.com

Role: As co-editor of Pharmakon, we work to put together a yearbook for pharmacy students to preserve everyone's memories together with their friends! We also have amazing photographers and designers that help capture events throughout the year.

Talk to me about: NBA (specifically the Boston Celtics), volleyball, running

Advice for my first-year self: Get involved! Its the best way to make friends and great memories



Rebecca Foster, 2T6 Speaker speaker@uoftpharmacy.com

Role: As the UPS Speaker, I guide discussions during meetings, ensure motions are reflected in the UPS constitution, and facilitate efficient, rule-abiding meetings where everyone can contribute. I also chair the Constitution Review Committee, which reviews and updates the constitution.

Talk to me about: Music, food, books

Advice for my first-year self: Make the most of your time at uoft and spend time doing things you enjoy along the way. All you can do is your best!



Kelly Chiu, 2T6 Webmaster webmaster@uoftpharmacy.com

Role: Manage UPS's websites, listservs, and emails to the general council.

Talk to me about: Solo trip to Japan!

Advice for my first-year self: Get involved with the pharmacy community! Don't be afraid to step out of your comfort zone:)



Lydia Wadie, 2T6 Sr. CAPSI Representative torontosr@capsi.ca

Role: I work with Anica, the Junior Representative, to oversee CAPSI initiatives at UofT, including competitions, awards, textbook sales, Pharmacy Appreciation Month (PAM) activities, and more. I also represent UofT pharmacy students on the CAPSI National Council and serve on subcommittees advocating for student wellness and learning opportunities. Talk to me about: Church, poetry, reading, coffee shops, museums, research Advice for my first-year self: Get involved and try out different things in pharmacy! You'll figure out what you're passionate about in time.



Anica Shafiq, 2T7 Jr. CAPSI Representative torontojr@capsi.ca

Role: I work with Lydia to plan competitions and social events, while also serving as a liaison between our school and the CAPSI National Council. Together with Lydia, I help host and facilitate local CAPSI initiatives, and on a national level, we sit on subcommittees that advocate for student wellness and learning opportunities.

Talk to me about: Thriller/mystery novels/movies/shows/docu

series/podcasts, serial killers, dance, workout routine, running **Advice for my first-year self:** One step at a time, trust yourself and show up with confidence you'll get through it!

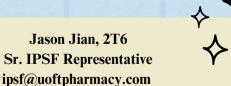


Laura Brennan, 2T7 UTSU Representative utsurep@uoftpharmacy.com

Role: My job is to represent UPS's interests on the UTSU council, and work as a liaison between the two councils. Sadly, I do not have voting rights on the UTSU council but I will do my best to raise awareness for the specific needs of healthcare related professional programs:)

Talk to me about: PharmaPride (a Leslie Dan Pharmacy Club), student activism, workers rights, being a niche internet microcelebrity, free Palestine Advice for my first-year self: Don't move into Grad House, look for an apartment instead. It's very convenient and close to campus, but it is hard to make a dorm feel like a home (especially while away from family, like me).





Role: I advocate for and raise awareness of public health issues on a global scale. We organize health campaigns and coordinate the IPSF Student Exchange Program (SEP), allowing international students to explore pharmacy in Canada and supporting our students in gaining global pharmacy experience.

Talk to me about: Your fav edm artist!

Advice for my first-year self: Travel while you still can





Jacqueline Cheung, 2T7 Jr. IPSF Representative ipsf@uoftpharmacy.com

Role: Planning events, supporting Sr IPSF rep, educating the student body on

SEP and other opportunities

Talk to me about: Travel, running, Toronto life

Advice for my first-year self: There's uncertainty in everything, just do it all



Emily Lam, 2T5
2T5 President
2t5@uoftpharmacy.com

Role: Coordinate the Therapeutic Choices sale and support the other members of the 2T5 Council in their various initiatives.

Talk to me about: Video games, board games, and new cycling routes!

Advice for my first-year self: Step out of your comfort zone - your time here will

be all the better for it:)



Olivia Schwarz, 2T5 2T5 Vice President 2t5@uoftpharmacy.com

Role: Work together with Emily to organize and promote events for our class, aiming to make the program as enjoyable and rewarding as possible.

Talk to me about: Books, coffee, hiking, good documentaries, plants & flowers, dogs, baking

Advice for my first-year self: Balance is so important! Make time for the people, places, activities that you love & that keep you going



Sara Rough, 2T6 2T6 President 2t6@uoftpharmacy.com

Role: As 2T6 President, I am responsible for leading the 2T6 Class Council in organizing social events, raise money for our graduation fund and start organizing our graduation party.

Talk to me about: Taylor Swift, coffee, chocolates, cheeses, restaurants in Toronto, chemistry/science research, new recipes to bake and just when you need someone to talk to about life!

Advice for my first-year self: Be the reason for someone's smile today and everyday:)



Anushka Sarkar, 2T6 2T6 Vice President 2t6@uoftpharmacy.com

Role: As 2T6 VP I help organize your CPR, liaise with faculty and OEE regarding our class, charity events, help organize our graduation as well as help out with events and logistics throughout the year.

Talk to me about: Rock climbing, volleyball, food spots in toronto, book recs and travel

Advice for my first-year self: Go have fun! You'll never be this young again.





Sohila Elgedawi, 2T7 2T7 President 2t7@uoftpharmacy.com

Role: As 2T7 my role is to make sure the 2T7s have a great year! And for the 2T8s to have a great phrosh!

Talk to me about: Coffee, any R.F Kuang book, research, Kdramas and poetry:)

Advice for my first-year self: It will be hard but it will be so worth it! Try everything out, it will be so fun!



Gabra Khalil, 2T7 2T7 Vice President 2t7@uoftpharmacy.com

Role: As the 2T7 VP my role is to plan 2T8 Phrosh and make sure the 2T7s are always having a good time.

Talk to me about: Anything. That includes Working out, Formula 1, Jobs in Pharmacy, Advancements in the profession etc.

Advice for my first-year self: Try to do everything you come across to gain experience, make connections and be the best pharmacist you can.

Pharmacy French Club (PFC)

PFC is a student-led club committed to fostering the use of the French language among students. We organize various events each semester, providing opportunities for students to practice speaking, writing, and reading in French. Our activities include conversation clubs, writing challenges, and French word searches. Our aim is to assist students in navigating pharmacy interactions in French. We welcome students of all proficiency levels.



Presidents: Julia Landucci (President), Kira Walker (Vice President)

Contact: pharmacyfrenchclub@gmail.com, IG: @pharmacyfrenchclub_uoft

Pharmaceutical Industry Primer & Education (PIPE)

PIPE is a club that aims to help students gain a basic understanding of the roles PharmDs play in the pharmaceutical industry. Now in our fourth year, our goal remains to provide students with opportunities to network with industry pharmacists and familiarize students with the structure of the Industrial Pharmacy Residency Program. This club was founded in 2021 because the founders felt that pharmacy students have little exposure to the pharmaceutical industry and the roles pharmacists can play in it, unless they take the third-year industry elective course. Therefore, we at PIPE aim to bridge this gap so PharmD students interested in the pharmaceutical industry can get a head start on their career planning. Our initiatives include networking events, informational panels, and career spotlights!

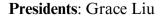


Presidents: Preston Chan

Contact: pipeuoft@gmail.com, IG: @pipeuoft

Pharmacy Pediatric Initiative (PPI)

PPI aims to: empower pharmacy students to provide optimal care and improve the quality of life for pediatric patients, raise awareness about issues faced by this population and their families, and finally to educate pharmacy students about the roles of pharmacists in pediatric care.



Contact: ppi.uoft@gmail.com, IG: @ppiatuoft



IMAGINE

CLUB'S WHO'S WHO?

Interprofessional Medical and Allied Groups for Improving Neighbourhood Environments (IMAGINE)

IMAGINE (Interprofessional Medical and Allied Groups for Improving Neighbourhood Environments) is an interprofessional, studentrun community health initiative aimed at promoting and providing health care to the core neighborhoods of downtown Toronto.

Presidents: Anthony Nguyen, Stuart McKinlay

Contact: imagin.clinic@gmail.com, Website: https://www.imagineclinic.ca/

Embracing Ventures and Orienting Leaders to Value Expanded Scope (EVOLVE)

EVOLVE is an organization geared towards encouraging new pharmacy professionals to get informed and comfortable with expanded scope services in pharmacy. We promote student collaboration and empowerment through initiatives such as the HOPE (Humans of Pharmacists' Expanded Scope) Campaign, which aims to shed light on the pharmacy experiences of a variety of individuals within and outside of the pharmacy community in a "Humans of New York" –like manner. Other initiatives include journal clubs, speaker events, trivia nights, monthly articles published in the Monograph, and more!

Presidents: Myuran Yoganathan and Nouman Zulfiqar **Contact**: evolveuoft@gmail.com, IG: @evolveuoft

Pharmacy Student Service Team (PhaSST)

The purpose of PhaSST is to promote and encourage community involvement and volunteerism among pharmacy students. In doing so, we hope to develop social awareness and compassion, which can be integrated into our practices as future pharmacists. We will accomplish these goals through the following actions: 1. Connect students to volunteer opportunities at local service organizations. 2. Host periodic discussions on topics relating to social issues, such as poverty and development. 3. Organize annual fundraising and donation events, we will help to support the needs of individuals and local programs.

Presidents: Chloé Lavoie and Elin Foulds

Contact: phasst.utoronto@gmail.com, IG: @phasstuoft

Technological Innovations for Pharmacy Students (TIPS)

Our club is dedicated to harnessing the power of technology to revolutionize the field of pharmacy. We aim to create a dynamic learning environment where pharmacy students can explore and leverage cutting-edge technological innovations to enhance patient care, improve drug delivery systems, and drive innovation within the pharmaceutical industry.

Presidents: Rawan Nasser, Varun Gupta

Contact: tipsuoft@gmail.com, IG: @tipsuoft, Facebook: TIPS UofT



Pharmacy Cafe Club

Pharmacy Café brings together experts in healthcare to share their experiences in research, entrepreneurship, clinical expertise, and pharmacy practice in a relaxed café-style atmosphere. We foster an engaging environment between healthcare experts and pharmacy students while exploring the latest innovations in the world of pharmacy. A typical Pharmacy Café event will commence with a short presentation by an esteemed speaker followed by a group discussion. Subsequently, the audience will have the opportunity to pose any questions or share their ideas with the speaker. We envision Pharmacy Café to be a place where pharmacy students can create, connect, collaborate, and innovate with respect to the future of pharmacy practice



Presidents: Amanda Gorgees and Ranya Mohamed (2023/24), new presidents for 2024/25 TBD!) **Contact**: pharmacy.cafeclub@gmail.com, IG: @pharmacycafeclub

Canadian Society of Hospital Pharmacists (CSHP)

We are a club dedicated to educating and advocating hospital pharmacy at UofT. Expect to see events tailored for students to network with hospital professionals, pharmacists, recent graduates/residents, and likeminded students. We are just one chapter under the Ontario branch wing. You can also sign up on the CSHP website to become and active member which will land you benefits such as subscriptions to the Canadian Journal of Hospital Pharmacy (CJHP), RxFiles, the CSHP e-Newsbrief, and the CSHP eBulletin and discounted liability insurance.



Presidents: Jessica Amiana. Freddie Yuan

Contact: cshpcouncil@uoftpharmacy.com, IG: @uoft CSHP

Pharmacy Dragon Boat Club (PDBC)

Pharmacy Dragonboat Club is a co-ed recreational dragon boat team that aims to embody the values of healthcare by providing an inclusive environment for young healthcare professionals to embrace fitness, grow as teammates and forge lasting relationships. As a team, our mission is to create a safe and inclusive environment for everyone in the gym and during water practice! We uphold the philosophy of getting comfortable with being uncomfortable in order to achieve our greatest success. We learn how to get out of our comfort zone, push each other to new limits, and foster a sense of community.

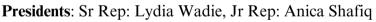


Presidents: Ramez Mikhail

Contact: pharmacydb@gmail.com, IG: @pharmacy.db

CAPSI UofT

CAPSI promotes and represents the interests of Canadian pharmacy students and prepare them to provide the best health care possible. We encourage our members to enhance the profession via competitions, conferences, socials, and events year round.



Contact: torontosr@capsi.ca and torontojr@capsi.ca, IG: @capsiuoft FB: Capsi

UofT



PSASS

Pharmacy Students for Antimicrobial Stewardship Society (PSASS)

PSASS is a student-run pharmacy club that is dedicated to advocating for antimicrobial stewardship and educating students on the importance of responsible and safe antimicrobial use. By starting this discussion, we hope to inspire you to learn and speak on these topics. Throughout the year we hold many events, including lunch-and-learns, trivia nights, and collaborations with SASS teams from other healthcare faculties, such as medicine and dentistry. In addition to our events, PSASS releases guidelines on the management of infectious diseases to help students during their practical rotations.

Presidents: Yasmeen Ameeriar and Shamim Gol

Contact: psass.uoft@gmail.com, IG: @psassatuoft, Facebook: psass.uoft

Compounding Opportunities and Mentorship Program for Pharmacy Students (COMPPS)

COMPPS is a pharmacy student club at the University of Toronto's Leslie Dan Faculty of Pharmacy. COMPPS provides compounding opportunities to enhance the student knowledge of compounding and hone their hands-on skillset in the art involved in preparing compounds. COMPPS also provides networking opportunities with other like-minded pharmacy students, pharmacy technician students, compounding leaders in pharmaceutical industry, pharmacists in the community, and other professionals.



Presidents: Amira Bouchema and Elin Foulds

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PharmaPride

PharmaPride is a club that promotes diversity and inclusivity within the pharmacy space, primarily focused on members of the LGBTQ+ community. This club focuses on making those voices be heard within the pharmacy profession and looks to educate other people on the community. Join us for fun events revolving on queer art and expression, along with talks with members of the LGBTQ+ community to shed light on issues that we face. Looking forward to seeing you take this journey with us!



Contact: pharmapride.uoft@gmail.com, IG: @pharmapride



Students for Optimizing & Advocating Pharmacy Endeavours

SOAPE is a non-profit, student-run organization at the University of Toronto Leslie Dan Faculty of Pharmacy. The vision of SOAPE is to help the profession of Pharmacy evolve through the involvement and leadership of pharmacy students. Our mission is to promote awareness of the competency of pharmacists to improve public health care and improve the efficiency of the health care system. SOAPE runs many events throughout the year including Pharmacy 101, Opioid Information/Naloxone Training Session, Diabetes Awareness Event, various events during PAM (Pharmacy Awareness Month), and more! Stay tuned!

Presidents: Andrew Tokatly, Matteus Torelli

Contact: soape.uoft@gmail.com, IG: soapeuoft / Facebook: SOAPE



Initiative for Mental Health Awareness in Pharmacy (IMHAP)

The Initiative for Mental Health Awareness in Pharmacy (IMHAP) is a student-led club that strives to promote mental health awareness within the Faculty of Pharmacy and beyond, as future pharmacists. By organizing educational events, Q&A sessions, and fun/relaxing in-person activities, we strive to foster a supportive environment for students that helps to break the stigma surrounding mental health. We offer opportunities for students to network with practicing pharmacists working in psychiatric fields and/or facilities, and demonstrate the invaluable role of a pharmacist in assisting with the pharmacological management of mental health conditions. We also emphasize the importance of providing direct support to pharmacy students throughout their education. During exam periods, we organize mindfulness activities and social events to help alleviate stress. Examples include sessions with therapy dogs and friendship bracelet-making gatherings. By offering these initiatives, we aim to create a supportive environment that enhances students' well-being and creates a sense of community. IMHAP is committed to fostering meaningful discourse within the pharmacy sphere to challenge the perceptions and approaches towards mental health. Ultimately, IMHAP aspires to create a long lasting influence in mental health advocacy within the student body and for our future patients!

Presidents: Elena Rosa Gastaldo, Hila Akbari Contact: imhapuoft@gmail.com, IG: @imhapuoft

Diabetes Awareness & Education Initiative (DAEI)

Diabetes has emerged as a significant global health challenge, impacting individuals, communities, and healthcare systems worldwide. This chronic condition not only complicates daily living but, if left unmanaged, can lead to severe complications that drastically reduce quality of life. Nevertheless, with proper management of blood sugar levels and healthy lifestyle choices, many complications can be prevented. Pharmacists have a crucial opportunity to positively influence the well-being of individuals, whether they have diabetes or are at risk, through education, early screening, and detection, as well as advocacy and policy influence. At DAEI, we believe pharmacists are uniquely positioned to substantially impact diabetes care. We aim to highlight the many ways pharmacists can help reduce the overall burden of diabetes on the healthcare system. This showcase will demonstrate how pharmacists can be key players in enhancing diabetes management and prevention strategies, ultimately improving patient outcomes.

Presidents: Shangavi Senthuran and Justin Wu

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Pharmacy Students for Women's Health (PSWH)

Pharmacy Students for Women's Health (PSWH) is a club that is dedicated to promoting women's health through education within the profession of pharmacy as well as in the community. Pharmacy students in this club have been involved in creating educational posts through monthly MythBusters regarding women's health. This club emphasizes how women face their own unique health issues throughout their lives. By providing a platform to address these issues, PSWH aims to eliminate any misconceptions about women's health. Over the past few years we have covered the following topics: female hygiene, premenstrual syndrome (PMS), polycystic ovary syndrome (PCOS) and cardiovascular disease in women. PSWH will provide students with opportunities to help create educational content regarding women's health, being involved in the community and awareness on how future healthcare providers can help improve women's health.



Presidents: Julia Ioannou

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University of Toronto Student Union (UTSU)

The University of Toronto Students Union (UTSU) serves as the representative body for students at the University of Toronto. Committed to advocating for student interests and enhancing campus life, UTSU organizes events, provides services, and engages in initiatives that promote student wellbeing, academic support, and social involvement. Through its elected officials and committees, UTSU collaborates with faculty, administration, and student organizations to address concerns, champion student rights, and foster a vibrant and inclusive university community.



Presidents: Laura Brennan - UTSU Representative **Contact**: Utsurep@uoftpharmacy.com, IG: @uoftsu

Pharmacy Students for Cancer Awareness (PSFCA)

Our mission at PSFCA is to educate pharmacy students on what cancer is, the role that pharmacists play in treatment, and how cancer affects patients as both a disease and lifestyle factor. We hope to provide avenues for students to connect with clinical and industry professionals, and partake in initiatives that to further promote cancer research and awareness through educational campaigns and events.



Presidents: Sanmaan Chakkal, Risansha Chhabra **Contact**: uoftpsfca@gmail.com IG: psfca.uoft

THE ANTI-CALENDERS ARE BACK THIS YEAR TO OFFER STUDENTS VALUABLE INSIGHTS INTO ALL THE COURSES IN THE PHARMD PROGRAM. WITH SUPPORT FROM OUR MONOGRAPH REPRESENTATIVES, THESE ANTI-CALENDERS PROVIDE DETAILS ON COURSE DESCRIPTIONS, PROFESSORS, AVERAGE GRADES, AND SUCCESS TIPS. WE HOPE YOU FIND THEM USEFUL IN PREPARING FOR THE UPCOMING SCHOOL YEAR!

- THE MONOGRAPH CO-EDITORS



Course Average	Course Description	
	PHM110H1: HEALTH SYSTEMS	
A-	This course offers a comprehensive look at the Canadian healthcare system, particularly focusing on Ontario. It delves into the structures, financing, and policies governing healthcare, with the goal of enhancing students' comprehension of the system and its social determinants. Coursework includes a written assignment, a midterm, a final exam, and the completion of IPE modules/activities, alongside regular sessions with guest lecturers. Key topics include health equity, obstacles to healthcare access, Indigenous and alternative medicine, and the development of interprofessional skills for better patient care. The course emphasizes interprofessional collaboration, with students engaging in small group activities to study teamwork and team dynamics. Tips for Success: Be sure to review lectures, IPE modules, readings, and videos, as any of these can be included in the tests. Memorization is crucial, so develop techniques such as flashcards to aid your study for both the midterm and final exams. The written assignment is a significant component of your final grade; thorough research and the application of classroom knowledge are vital. Since the course requires memorization of dates, lists, and processes, effective memorization strategies will be very beneficial, particularly because the exam is cumulative.	
	PHM113H1: PHARMACY INFORMATICS	
B+	Pharmacy informatics centers on the efficient management and dissemination of medication data, information, and knowledge to achieve optimal medication outcomes. This course introduces the essential resources used by pharmacists in clinical environments, including both print and online references. Students will learn to employ these tools to ensure safe and effective patient care throughout the medication process, which is critical for MTM-1 labs and EPE-1. It is integral to clinical practice as it teaches about drug information resources, classification and documentation of drug-related queries, the significance of electronic health and medical records, and the role of informatics in medication management. The course helps students develop the ability to identify, access, retrieve, create, and share pertinent patient and health information for safe patient care. The coursework includes one midterm exam, two online assignments, a timed assignment and a comprehensive final exam. Tips for Success: To excel in this class, focus on reviewing the assigned modules alongside lecture content. The timed assessment requires utilization of the online resources discussed in class to answer drug-related questions efficiently. Being adept with these tools can significantly improve your performance. The course includes a timed assessment, midterm, and final exam. Success in the timed assessment hinges on your ability to quickly and effectively use drug information sources such as RxTx, DPD, Lexicomp, and ODB e-Formulary. Given the heavy emphasis on memorization, take this course as an opportunity to master the resources you will frequently use in a professional setting.	
	PHM130H1: PHARMACEUTICAL CALCULATIONS	
N/A	This course provides an introduction to essential pharmaceutical calculations used in community and hospital pharmacy environments. It includes calculations for dispensing, pediatric dosages, and compounding. Lectures highlight the practical application of these calculations in clinical settings and offer detailed walkthroughs of sample problems. Students are also given textbook exercises for additional practice. The course features two midterms and a final exam, with a pass/fail grading system. To pass, students must score at least 85% on the first midterm and final exam, and achieve a perfect score (100%) on the second midterm, with an option to retake if needed. Emphasizing accuracy, the course aims to ensure students can deliver safe and effective patient care. Tips for Success: Stay Calm! Hitting the required 85% and 100% scores is achievable with practice. Make sure to review the examples covered in lectures and complete all homework assignments. Take advantage of tutorials, participate in the Quercus discussion board, and consult the TA for help. Consistently work on textbook problems and use your books and notes during exams to tackle difficult questions effectively.	

Course Description
PHM142H1: METABOLIC BIOCHEMISTRY AND IMMUNOLOGY
This course is split into two segments, each instructed by a different professor. The first segment delves into the biochemistry and regulation of human metabolic pathways, emphasizing the medical consequences of disturbances in these processes. It also covers how drugs interact with these pathways and the cellular anatomy of relevant organs and systems. The second segment introduces core concepts in immunology and explores how drugs influence immune responses through various regulatory mechanisms. The course includes two in class quizzes, a midterm, and a final exam that is not cumulative. There is also an optional group presentation for extra credit. Lecture materials are available on the PHM142 course website, and exams will reflect the content from lectures and class discussions. Tips for Success: Taking advantage of the optional group presentation can earn you up to 4% extra credit, so make use of it! Both the midterm and final exams will require you to memorize and apply information to practical questions. The course's focus on mechanisms, pathways, and drug treatments can be challenging, so it's important to attend lectures and maintain detailed notes to
manage the extensive content and memorization required.
PHM144H1: PHARMACOKINETICS
This course investigates how drugs are processed in the body, focusing on the kinetics of absorption, distribution, metabolism, and elimination. It combines lectures and tutorials to teach new pharmacokinetic concepts and equations. Students will also explore pharmacodynamics, drug dosing strategies, and potential drug-drug interactions. The course involves multiple instructors and features four workshops, 4 quizzes, a midterm, and a comprehensive final exam with multiple-choice, short-answer, and essay questions. It examines how physiological and biochemical factors affect drug behavior, particularly the interplay between drug characteristics and ADME processes.
Tips for Success: Known for its difficulty, this course requires diligent practice. Key to success is mastering both the theoretical concepts and practical applications through rigorous practice with tutorial problems, homework, and previous exams. Expect to handle numerous calculations related to pharmacokinetics and pharmacodynamics, and memorize various transport mechanisms and metabolic reactions. Given the extensive content, it's crucial to keep up with the material, as each lecture builds upon the last. Regular participation in tutorials and workshops will reinforce your learning and aid in exam preparation. Staying engaged and consistent with your studies will be essential for excelling in this demanding course.
PHM145H1: HUMAN HISTOLOGY AND ANATOMY
This foundational anatomy course delves into the structure and function of various components of the human body, including cells, cavities, and organs. It requires extensive memorization, with a strong emphasis on recalling detailed lecture content for exam success. The course is evaluated through three tests, each representing approximately one-third of the final grade. It covers diverse body systems using clear diagrams and straightforward explanations, and introduces human histology through a systematic approach. Tips for Success: Try to attend class. Lecture slides will provide you with comprehensive information but it is important that you use memorization techniques. Given the heavy emphasis on memorization, developing effective study strategies is key to mastering this

Course Average	Course Average
	PHM146H1: FUNDAMENTALS OF PHARMACOLOGY
B+	This course introduces the core concepts of pharmacology, focusing on how drugs are processed and act within the body. It examines various classes of drugs, their receptor interactions, and the physiological effects these interactions produce. The assessment includes three quizzes, two quizzical assignments where you design test questions, a midterm, and a non-cumulative final exam. 5% of your mark is also allocated to participation in answering quizzical questions created by your peers. The course primarily emphasizes pharmacodynamics, which explores how drugs influence bodily functions. Lectures address specific receptors, the drugs that interact with them, and the resulting effects. Topics include dose-response relationships, drugs affecting the autonomic nervous system (both cholinergic and adrenergic), drugs impacting the neuromuscular junction, and those altering autacoid and endocrine functions. Tips for Success: To excel, focus on mastering the memorization of drug names and their actions. Effective note-taking and personalized memorization strategies are crucial due to the extensive drug information. Understanding drug mechanisms and their targets is essential for performing well. Stay engaged with lectures, maintain detailed notes, and apply targeted study techniques to reinforce your understanding.



Winter Term Courses

Course Average	Course Description	
PHM	1101H1: PHARMACOTHERAPY 1: FOUNDATIONS AND GENERAL MEDICINE	
C+	This course is centered around a case-based learning model designed to equip students with practical skills in managing patient drug therapies. It focuses on diagnosing, resolving, and preventing drug-related issues and formulating treatment plans for common health conditions. The curriculum includes weekly lectures on pathophysiology, pharmacology, and pharmacokinetics, which are applied in workshops to develop comprehensive pharmacotherapy workups and care plans. Evaluations consist of quizzes, workshop participation, assignments, a midterm, and a final exam. As the introductory course in a series of nine Pharmacotherapeutics classes, it provides essential preparation for patient care, including specialized topics such as geriatrics and pediatrics. The course emphasizes a structured decision-making process to apply theoretical knowledge to real-life patient scenarios.	
	Tips for Success: Effective preparation is crucial for each case study, as detailed case analyses and care plans require significant time and effort. Start working on case studies as soon as they are introduced. While working in groups can save time, ensure you fully understand and contribute to all aspects of the case work-ups, as these will be included in exams. Detailed note-taking during lectures and careful review of assigned readings will aid in focused preparation for workshops. Although the course may seem overwhelming, strong time management skills will help you stay on top of the workload.	
	PHM114H1: SOCIAL & BEHAVIOURAL HEALTH	
A-	This course is structured into two main segments which are taught by two different instructors. The first segment focuses on sociological theories related to health and healthcare, including ethical principles and their application to real-world dilemmas faced by professionals. The second segment addresses psychological theories to better understand patient behaviors, equipping pharmacists with the skills to support patients more effectively. Students will explore various psychological perspectives, including behaviorism, cognitive theory, developmental theory, and psychoanalysis, to understand different reactions to health challenges. The course features two online quizzes, a writing assignment, a midterm, and a non-cumulative final exam.	
	Tips for Success: The course is taught by two different professors, each with their unique approach and testing style. Since the material is crucial for your future role as a pharmacist, attending lectures will help you understand each professor's focus. Online quizzes are based on specific lecture content and are a mark booster so make sure to complete them.	
	PHM105H1: MEDICATION THERAPY MANAGEMENT 1	
N/A	The MTM (Medication Therapy Management) course is designed to prepare students for effective practice in community pharmacy. It emphasizes the clinical knowledge and practical skills necessary for pharmacy work. The course includes practical labs focused on skill development in patient care (PCS) and professional practice (PPS). In PCS labs, students provide counseling on medications selected from a pre-published list. PPS labs assess skills in handling verbal prescriptions, verifying prescriptions, managing drug information, and processing prescriptions. This course is the first of a three-year MTM series, aimed at helping students apply their MTM knowledge and skills, and lay the groundwork for their professional identity as pharmacists, in preparation for their initial early practice experiential (EPE) rotation. Tips for Success: While individual lab grades might seem minor, they accumulate over the semester, so don't be discouraged by early results. Learn from mistakes to improve in future labs. Engage actively in lectures and ask questions to gain valuable insights. For PPS labs, keeping a checklist or the rubric handy can ensure you meet all requirements. In PCS labs, collaborating with peers can help you	

focus on specific drugs during each counseling session, making the workload more manageable.

Course Average	Course Description	
	PHM140H1: MOLECULAR PHARMACOLOGY	
В	This course investigates how drugs interact with cellular receptors and signaling proteins. It provides a detailed look at various protein families at a molecular level, exploring their structures, mechanisms of action, how they are affected by drugs, and their roles in diseases. Key principles of molecular pharmacology are covered to explain the relationship between drug doses and their effects, with a focus on concepts like affinity, allostery, intrinsic activity, and efficacy. The course is divided into four parts, each addressing a different receptor type: GPCRs, ion channels, nuclear receptors, and tyrosine kinases, with each section led by a different instructor. Students will learn about drug-receptor interactions, ligand binding, and how these interactions influence cellular signaling pathways. Tips for Success: This course is known for its difficulty. To excel, begin your studies early and maintain a steady review schedule. The first midterm covers extensive material and can greatly affect your overall grade. Note that over the years different professors have taught this course and you have access to all of the previous exams. Effective study habits and regular preparation are key to mastering this challenging course.	
	PHM141H1: PHARMACEUTICS	
В	This course focuses on the principles and practices of drug design, exploring the parameters and methodologies involved. Topics include clinical pharmacology, biopharmaceutical factors, pre-formulation, and the drug development process. Assessment consists of 2 quizzes and 2 submitted worksheets, a midterm, and a comprehensive final exam. The course emphasizes practical challenges in drug development and compounding, such as ensuring physicochemical compatibility, effectiveness, and safety. Each professor presents different aspects of the course through their distinct teaching methods. Key issues covered include maintaining sterile conditions, proper drug preparation environments, and understanding the molecular characteristics that influence dosage forms. Assessments will test your ability to apply lecture material and perform calculations. Tips for Success: Pay close attention during lectures, as later sections often cover advanced topics. Make sure to go to class! Be ready	
	for both practical application and recall questions on exams, which can differ in format based on the instructor. Review sample questions to get a sense of how to approach various types of questions. Familiarize yourself with the equations and their practical applications, as this will aid in using the equation sheet effectively during exams.	
	PHM143H1: PATHOBIOLOGY & PATHOLOGY	
В-	This course investigates the chemical mechanisms underlying diseases, focusing on the physiological and biochemical changes associated with various pathological conditions. Students learn how diagnostic tools can confirm the presence of diseases and influence treatment strategies. Different guest lecturers, each specializing in a specific area, lead the course. Evaluation includes a midterm and a non-cumulative final exam, both featuring multiple-choice questions. Tips for Success: Due to the extensive range of topics, the course requires strong memorization skills. Effective study techniques, such	
	as active recall and spaced repetition, can aid in retaining information. As each lecturer may have unique testing styles, it's essential to attend lectures and focus on the key points they highlight. Reviewing material during TA-led sessions can help clarify the material.	



Course Average

Course Description

PHM201H1: PHARMACOTHERAPY 2: SELF CARE & MINOR AILMENTS PRESCRIBING

A-

This course provides a comprehensive overview of key topics essential to daily pharmacy practice, combining both theoretical knowledge and practical skills. Lectures cover areas like patient communication, dermatology, physical assessments, drug-induced skin reactions, and neoplasms. Skills labs focus on conditions such as acne, psoriasis, dermatitis, allergic rhinitis, cough and cold, warts, athlete's foot, lice, scabies, insect bites, burns, otitis media, and otitis externa. Skills labs follow a panelist-style format with groups of 15-20 students. Students are randomly divided into two groups: one group interacts directly with the professor to discuss case studies, while the other participates online through PeppeR. Before each lab, all students must prepare notes on the topics and submit them to Quercus, as participants are selected randomly on the day. Assessments include topic quizzes, a midterm, a final exam (all multiple-choice), and written reflections on pharmacist encounters. Attendance is monitored through the submission of lecture and preparation notes.

Tips for Success: Attendance is mandatory, so arrive on time. Be prepared to participate—if called upon. Take good notes, especially on what the professor emphasizes. For exams, use active recall but be cautious of similar answer choices. Prepare your notes in advance and update them during class with new insights. Most tested material comes from the professor's resources and class discussions, which are also relevant for MTM2 labs. And remember, zinc oxide is your best friend!

PHM202H1: PHARMACOTHERAPY 3: ENDOCRINOLOGY, NEPHROLOGY, AND UROLOGY

B+

This course covers a range of conditions, including Overactive Bladder (OAB), Benign Prostatic Hyperplasia (BPH), Erectile Dysfunction (ED), Urinary Incontinence, Type 2 Diabetes, Menopause, Contraception, Thyroid Disorders, and Nephrology (AKI, CKD). The course includes lectures that provide foundational knowledge and weekly workshops focused on case-based discussions in smaller groups. Assessments include workshop quizzes (pre/post), care plans, two assignments, a midterm, and a final exam. The exams feature multiple-choice, short-answer, and long-answer questions, testing both foundational knowledge and case-based problem-solving skills. Workshops offer a collaborative environment to discuss patient cases and develop care plans, providing valuable hands-on learning experiences.

Tips for Success: Focus on the lecture slides, as they highlight key points that quizzes will test, often on specific medication facts. Review these slides before each workshop to prepare for quizzes and to reinforce your understanding of the material. Attending and actively participating in workshops is crucial for clarifying concepts and preparing for case-based exam questions, as well as for the care plan component in MTM2. Utilize the workshop time to do well on midterms and final exam.

PHM205H1: MEDICATION THERAPY MANAGEMENT 2

Pass/ Fail MTM2 is a course that builds on topics from first-year, including Asthma, COPD, GERD, OA, OP, Gout, and Constipation, while introducing new material from PHM201 and PHM202. The course includes two alternating lab components: Clinical Care Skills (CCS) and Patient Care Skills (PCS). CCS labs are conducted in person and involve three tasks: taking a verbal order and entering it into Kroll, verifying a prescription, and creating a care plan. These labs are more challenging than in MTM1, with potential errors or omissions in the verbal orders. PCS labs, require you to counsel a patient within a 10-minute time limit, often addressing a drug therapy problem (DTP). To pass the course, you must successfully complete 3 out of 4 components, including both CCS & PCS labs.

Tips for Success: When preparing for labs, work with classmates to create condensed drug tables for each medical condition, or familiarize yourself with CPS for quick access to drug information. For the CCS component, always take verbal orders in pen—using pencil can result in a fail. Avoid interrupting the prescriber, and if you make an error, cross it out neatly with your initials. While waiting for your turn, focus on the RxC component to gather necessary information for your care plan. In PCS labs, ensure you cover all patient details, such as name, DOB, allergies, and medical conditions. Stay on top of your PCT2 and PCT3 topics, as they will be tested. Working with peers to practice potential DTPs and create concise, patient-friendly notes can also be very beneficial.

	Course Average	Course Description
	PHM212H1: RESEARCH METHODS FOR PHARMACY	
<i>-</i>	B+	Research Methods is a course that explores various research methodologies in pharmacy, including clinical trials, observational studies, systematic reviews, and clinical practice guidelines. The course teaches how to critically appraise literature and conduct research relevant to clinical questions. The format includes lectures, along with online practice quizzes to reinforce learning. Key assessments include a journal club group presentation, midterm, and final exam. The journal club assignment is particularly valuable for practicing critical appraisal skills, which are essential for the exam. By the end of the course, students should feel confident in evaluating and interpreting clinical research.
3		Tips for Success: To excel in this course, create comparison tables and flow charts to understand the nuances of different study designs. Revisit the lectures multiple times to reinforce the material, and effectively summarizes key points and provides helpful examples. Regularly complete the "PrACTice" quizzes throughout the semester to reinforce concepts, especially when preparing for the midterm and final exams.
	PHM24	1H1: TOPIC IN PHARMACEUTICAL QUALITY AND CLINICAL LABORATORY MEDICINE
•	A-	This course covers topics related to pharmaceutical quality, manufacturing, and drug approval, with both lecture and lab components. It's divided into two lecture parts: one on pharmaceutical quality and manufacturing processes, and the other on special topics like COVID vaccines and nanomedicines. Assessments include two midterms, a final exam, and three compounding labs where you'll create tablets, capsules, creams, solutions, and suppositories. The labs are engaging and require minimal preparation, aside from attending the tutorial beforehand. Tips for Success: Prepare thoroughly for the compounding labs by reviewing the manual and pre-lab videos is very helpful, and don't
		forget to bring your lab coat, gown, goggles, and TCard—without these, you won't be allowed in. Do not stress, these labs are fun. Dr. Reilly's section is detailed, so active recall can be effective for remembering specific details he tests on.
		PHM242H1: MICROBIOLOGY OF INFECTIOUS DISEASES
	B+	This course focuses on the bacteria, fungi, and viruses that cause infectious diseases, providing essential knowledge for Pharmacotherapy 4: Infectious Diseases. The course is content-heavy but fascinating. Assessments include a midterm and a final exam, both in multiple-choice format, requiring significant memorization. Lectures are delivered through a combination of live sessions and audio-embedded PowerPoint presentations, giving you flexible options for learning. Tips for Success: This course covers a substantial amount of material, so attending lectures regularly is crucial to avoid falling behind. If practice midterms or exams are provided, make sure to complete them, as Dr. Crandall often reuses or asks similar questions. Active recall and creating drug tables for antibiotics, antivirals, and antifungals are highly recommended to prepare for the specific
L		questions you'll encounter on exams.



Course Average	Course Description	
	PHM203H1: PHARMACOTHERAPY 4: INFECTIOUS DISEASES	
В-	The infectious diseases pharmacotherapy course builds on the microbiology foundation and covers topics such as antimicrobial pharmacology, allergies, stewardship, and specific drugs like vancomycin and aminoglycosides. The course is divided into CNS, respiratory, cardiac, gastrointestinal, genitourinary, and skin & bone infections. It includes alternating lectures and workshops with cardiology, where you'll tackle patient case studies. Assessments involve pre-workshop quizzes, midterms, a final exam, and care plan assignments (random 2 out of 5 care plans are marked due every 2 weeks). Topics range from influenza and pneumonia to STIs, HIV, and multi-drug resistant organisms. Tips for Success: Creating drug tables for antibiotics is crucial—make sure to include the drug class, drug name, spectrum of coverage etc. Use resources like Lexicomp, IDSA, and DiPiro to deepen your understanding of conditions and antibiotics. Pay close attention to the guidelines specified by your lecturer (IDSA, Ontario, LHIN) as exam questions will require you to apply the correct one. Study the pharmacology of antimicrobials thoroughly, as these drugs are frequently revisited in lectures. Mnemonics and drug tables can simplify memorization. Start studying early, attend all workshops, and don't fall behind, as catching up can be challenging. Some topics will also appear in MTM 3 labs.	
PHM204H1: PHARMACOTHERAPY 5: CARDIOVASCULAR DISEASES		
B+	This course covers essential cardiovascular diseases that pharmacists often encounter, including Dyslipidemia, Hypertension, Venous Thromboembolism, Acute Coronary Syndrome, Heart Failure, Arrhythmias, Stroke, and more. The course includes lectures by Dr. Kertland, Dr. Erclik, and guest lecturers, with workshops alternating with PHM203 (Infectious Diseases). Workshops are case-based discussions with individual and group quizzes, followed by care-plan assignments. Assessments include quizzes, a midterm, a final exam, and a partnered assignment. Tips of Success: Care plans should be patient-specific and include justifications for non-pharmacological recommendations. For example, instead of just stating "initiate exercise," explain why it's beneficial for the patient. Review lecture slides thoroughly before quizzes, as the individual and group quiz grades add up over time. Workshops are interactive and provide great opportunities to ask questions, clarify concepts, and practice identifying potential DTPs, which will also help with PHM206 (MTM3) and exams.	
	PHM206H1: MEDICATION THERAPY MANAGEMENT 3	
Pass/ Fail	MTM3 focuses on communication skills, empathy, motivational interviewing, and conducting a best possible medication history (BPMH), rather than the CCS and PCS components seen in MTM1 and MTM2. Labs involve small group interactions with standardized patients, where you're observed during a 10-minute counselling session. A one-page, double-sided cheat sheet is allowed to guide your assessment. Following the session, you'll submit a DAP note documenting the interaction. While missing checkpoints won't necessarily result in failure, it's important to focus on effective communication and patient safety. The course also includes BPMH and medication reconciliation as part of the milestone lab. Tips of Success: To succeed in MTM3 labs, practice with friends or in front of a mirror to improve your conversational approach rather than following a strict format. Attend office hours to get feedback on how to improve after each lab. Weekly lectures will focus on communication skills, not therapeutics, and provide feedback from previous labs. Familiarize yourself with the paper copy of CPS beforehand, noting key pages for quick reference. Always bring your TCard and white coat, and leave electronics in your locker as they aren't allowed in the lab.	

Course Average	Course Description	
	PHM213H1: HEALTH ECONOMICS AND PHARMACOECONOMICS	
A-	This course covers basic economic concepts like supply and demand, efficiency, and equity, before focusing on health economics, including drug reimbursements and healthcare policy. Lectures incorporate case studies and reports, such as CADTH reports, to illustrate real-world applications of these concepts. Assessments include two assignments (individual and group), a midterm, and a cumulative final exam. One assignment involves a critical appraisal of a health economics paper. Graphs are used throughout to aid understanding, and the professors are receptive to questions during lectures, so don't hesitate to ask for clarification. Tips of Success: This course introduces a unique perspective on healthcare through economics, which may be unfamiliar compared to typical science classes. It's particularly useful for students interested in careers in industry or government, especially in drug cost analysis and reimbursement methods. Time management is crucial for success in the midterm and final exams. Professors provide past exams for practice, and attending the pharmacoeconomic literature critical appraisal workshop is highly recommended, as this will be tested. Familiarizing yourself with the literature early on will help in understanding its strengths and limitations.	
PHM	PHM215H1: MANAGEMENT, SKILLS, COMMUNICATION AND COLLABORATION	
A-	This course is split into two sections, each taught by a different professor. Monica Gautam's section focuses on the business aspects of pharmacy management, including human resources and finances, and centers around the business plan competition. This group project, which involves creating a healthcare-related venture, forms a major part of your grade. You'll be assessed both individually and as a team, with assignments on collaboration and personal branding. Zubin Austin's section covers topics such as Diversity, Equity and Inclusion, Emotional Intelligence, Power and Leadership, Teamwork in Healthcare, Tort Law, and Professional Negligence, with these being tested on the final exam. Zubin's lectures are interactive and engaging, offering valuable insights for your future career. Tips of Success: Research the healthcare landscape to understand current issues and potential solutions for your business plan competition. Utilize your assigned mentor for valuable feedback and constructive criticism to enhance your pitch. Seek input from friends, colleagues, and managers to uncover insights about yourself. Additionally, set up a Zoom call with your mentor to discuss and refine your ideas. Personalizing the course material and relating it to yourself can help reinforce concepts and improve exam performance.	
	PHM230H1: PHYSICAL ASSESSMENT AND INJECTION TECHNIQUES	
B+	This course covers General Assessments, Vital Signs, and specific systems including Cardiovascular, MSK, Respiratory, Neurological, and Head and Neck assessments. It includes lectures, quizzes, a midterm, and a final exam focused on lecture content. Labs, which are graded on participation, offer hands-on practice with stethoscopes, blood pressure measurement, temperature taking, and ear assessments. You will also learn and get certified in various immunization techniques and injections. Quizzes may cover both lecture and lab material, and in-person lab sessions will involve practicing injections with a partner (using saline) for certification. Tips of Success: Although labs are ungraded (with participation marks for attendance), pay close attention to the debriefing, as it might include quiz questions not covered in lectures. For this course, active recall is the most effective study method since the exams are multiple-choice and may include patient case scenarios and pathophysiology facts. Review lectures thoroughly and practice recalling specific facts and differentiating aspects of physical assessments to prepare effectively.	

Course Average	Course Description
	PHM240H1: THE SCIENCE OF PHARMACOTHERAPY
B+	This course features 50 modules covering various pharmacotherapy topics and emphasizes self-directed learning. Evaluation consists of two midterms (each covering about 20 modules) and a cumulative final exam, all of which use short-answer questions. The exam questions are drawn from the modules with some modifications, requiring significant memorization. Despite the extensive content, some modules overlap with other courses, providing refreshers. Tutorial sessions before exams are highly useful for guiding your studies and highlighting key topics. Tips of Success: Effective time management is crucial for success in this self-directed course. Aim to complete 5-6 modules per week and reserve time for reviewing the content multiple times. Initially, answer questions based on your knowledge, then analyze the answers to identify key concepts. Tutorials offer guidance on likely exam topics, so use them to focus your studies. When writing answers, be concise and follow the sentence range recommended by Uetrecht. Logical reasoning can earn you marks even if you're unsure about a question. Hand-written summaries and past exams are valuable for review and preparation.



THIRD YEAR ANTICALENDAR



Fall Term Required Courses



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Course
Average

Course Description

PHM301H1: PHARMACOTHERAPY 6: HEMATOLOGY, ONCOLOGY, AND IMMUNOTHERAPIES

В

The course covers a broad range of topics in oncology, from the basics of cancer and chemotherapy to the treatment of specific cancers such as lung cancer and breast cancer to the management of side effects from cancer treatment to the practicalities of oncology pharmacy with some coverage of immunology. Similar to the other PCT courses, the course is divided into didactic lectures and small group workshops. Readings and learning objectives are posted prior to each workshop. The documents for the learning objectives are very dense, but they provide answers to the learning objectives, clear drug tables, and they explain clinical trial results, recent updates in practice, and current debates and controversies. These will help with creating the care plans, which are a series of questions related to a given written case. For the workshops, the students are split into groups to answer the pre-session quiz as a team. This portion is gamified, where a prize is given to the group who scored the most points. The post-session quiz is based on the pre-readings and workshop discussions.

Course Breakdown: 5 post-workshop quizzes worth 2.4% each (total 12%), two out of four submitted care plans worth 6% each (total 12%), a midterm and a final exam, both 38%. The exams are all multiple-choice and open-book but it's best to organize your printed notes prior to the exams due to the density of the material.

PHM302H1: PHARMACOTHERAPY 7: NEUROPSYCHIATRY

B-

In this course you will learn about many mental health conditions including depression, anxiety, schizophrenia, bipolar disease, seizure disorders, dementia, alcohol/tobacco/opioid/benzodiazepine use disorders, and many others. On top of the weekly lectures, there are workshops that go through the lecture material and readings in which you will apply that knowledge to several cases. Be prepared for those and make sure to participate to fully grasp the content. I would advise making drug tables for all the lecture topics which is incredibly useful and summarizes everything you need to know without constantly scrambling for the information. Recall from second year Research Methods, where you had to critically appraise research articles, which is one of the assignments in PCT 7. It consists of 2 parts – the clinical question (5%) and the written report (25%). While not challenging, I would recommend looking over last year's Research Methods notes and recall how to conduct critical appraisal and formulate research questions.

The midterm exam was MCQ + SA, worth 30% of your grade. Make sure you attend lectures and workshops, do the readings and make drug tables. It can be a lot sometimes but some of the material does carry over to other subjects so it is important to stay up to date with what's going on in class. There are 2 reflections worth 2.5% each, consisting of patient assessment in the virtual model. These are quite easy and won't take that long, just watching/reading a piece of media and creating a reflection. The final exam is worth 35%, not cumulative, although a lot of material does translate to the second half of the course!

THIRD YEAR ANTICALENDAR

Course Average	Course Description	
	PHM305H1: MEDICATION THERAPY MANAGEMENT 4	
Honours /Pass/ Fail	This is the final MTM, congratulations! It has the same format as previous MTM courses, lecture with 3 hour labs each week. Similar to MTM 3, the labs will consist of scenarios based on lecture material from other courses like Psychiatry or past 2nd year courses. This year topics included: health promotion, palliative care, adapting/renewing prescriptions, med rec, and shared decision making. Understand that this MTM focuses more on the professional scope of practice rather than clinical knowledge (although you still have to know it). The lectures are great for understanding how to be successful, how to improve upon your mistakes and what to expect in the upcoming labs. Naomi is very accommodating and is willing to help you out if you have any questions, so take advantage of it, and you will do well. Overall, it is not much different from past MTM, but there is definitely worthwhile topics to cover this year. After this, no more MTM!	
	PHM310H1: PHARMACY IN THE MODERN HEALTH CARE SYSTEM	
A-	This course is the second part of the health systems course taught in first year. Assessments this year included two group assignments (5% each), two individual assignments (20% each), 10% participation on a discussion board, and a short-answer final exam (40%). Several guest lecturers were involved in teaching the course and the lectures were synchronous (non-recorded). A variety of topics were covered including quality in pharmacy, patient safety, drug access, supply and reimbursement, e-Health, patient identity, pharmacy leadership	
PHM3	30H1: PREPARATION FOR ADVANCED PHARMACY PRACTICE EXPERIENCE	
Honours /Pass/ Fail	This course is the preparation course for upcoming APPE rotations. It requires you to understand how to handle patient cases and scenarios you will come across during your placements. For example, it goes over how to prioritize DTP's, how to reflect on mistakes, and how to formulate research questions (critical appraisal). The most important aspect of this course is that you must pass ALL assignments and the final exam to pass the course. The work is not difficult, and as long as you keep up to date with the term and what's going on in class you will be fine. The final exam was cumulative and it is important to attend lectures because a lot of what was presented verbally is not found on the slides but is tested on the final (which was all short answers). Besides the assignment and exam, the course also consists of 4 "DTP Vignettes" which are just quizzes that present 10-20 cases each and require you to identify the relevant DTP. You must score 100% on these vignettes in order to pass the course but the good news is that you have unlimited attempts to do so. Overall, go to class, do the vignettes, and pay attention to what is being said in lecture so that you will not be surprised by the exam questions.	
	PHM340H1: INTRODUCTORY TOXICOLOGY	
В	Toxicology is a very biochemistry-heavy course that introduces mechanisms of drug-mediated toxicity in different organisms. Like molecular pharmacology, this course is cross listed as an undergraduate pharmacology course. Originally developed by Dr. Peter Wells, the brother of the legendary J Wells who taught molecular pharmacology, content here will not be as technically challenging as previously encountered in molecular pharmacology, with one major caveat-there are two high stakes midterms and a final exam. Each midterm exam will cover only one topic (and in the past exams were only a single question) worth 25% on your final mark. Questions are essay style and it is important that you are as thorough with your answer as possible. Do not answer straight to the point-explain any concept related to your question as detailed as possible. The marking scheme will be very selective to the point where not including specific keywords will cost you marks. The content will be very straightforward and will be a breeze if you're able to piece together concepts throughout the course.	

Fall Term Elective Courses

Course Average	Course Description
	PHM320H1: GLOBAL PHARMACEUTICAL POLICY
A-	Broad topics covered include corruption in the pharmaceutical sector, role of key stakeholders in global health, trade agreements and impact of IP rights, and conflicts of interest. The class requires participation and weekly readings (~30 minutes-1 hour weekly). However, the class is very engaging, and Dr. Kohler is a fantastic lecturer. The style of this course differs from typical pharmacy courses but is very interesting for anyone with an interest in global health. Evaluations include course participation (10%), a group case study presentation (10%), an oral presentation on a pharmaceutical policy topic area that the student will research (35%), and a final exam (45%).
	PHM321H1: SELECTED TOPICS IN THE PHARMACEUTICAL INDUSTRY
A-	This class offers an excellent introduction to the pharmaceutical industry, providing valuable insights into various aspects of the field. Each lecture focuses on a different topic, highlighting different roles within the industry, specific departments, or stages in the drug development process. This course invites a lot of guest speakers, which not only enriches the learning experience but also provides ample networking opportunities and a chance to seek clarification from industry professionals. Unlike traditional courses, there is no midterm exam; however, numerous assignments (worth 60% in total) are given instead. These assignments are highly practical and mirror the real-world work one would encounter in the industry. Success in this course is easily attainable by attending classes regularly and staying on top of the assignments. Additionally, the assignments are graded fairly, ensuring that students receive appropriate recognition for their efforts. The final exam is a combination of short-answer and multiple choice, and is worth 40%. Overall, this course provides a comprehensive overview of the pharmaceutical industry and presents a pathway to excel by actively engaging in lectures and demonstrating competence in the assignments.
	PHM323H1: MOLECULAR MECHANISMS OF DRUG ACTION
N/A	While Molecular Pharmacology was no doubt a hard course for many (if not all) first-year students, don't let that discourage you from taking PHM323! This course is like Mol Pharm 2 but for undergrads. PHM323 was taught by four instructors, some of which we've had in previous years. The course consisted of a midterm and final, both worth 50%. The first midterm covered Professor Redka's mechanisms (short answer) and Professor Crandall's microbiology content (multiple choice), and Tameshwar Ganesh both of which felt like a review of what was taught in previous years in PHM140 and PHM242, respectively. New material by Dr. Erclik and Dr. Ganesh was covered in the final. Professor Erclik taught cell signaling in cancer and cancer drugs. Professor Ganesh focused on nucleic acids, DNA structure and nucleic acid therapies. The final was mostly short answer, with some fill in the blank and multiple choice. Some topics are review from the oncology course (PHM301) and some from basic concepts taught in an undergrad biology/genetics course. Lectures felt comfortable, intimate and very open for discussion. All lectures were recorded but attendance was obviously encouraged. Every professor provides either past exams or sample practice questions.

Course Average	Course Description	
	PHM324H1: RECENT DEVELOPMENTS IN DOSAGE FORM DESIGN	
27/4	This course initially reviews the fundamentals of pharmacokinetics and then delves deeper in the methods of designing different controlled release dosage forms. Exciting topics include nanoparticles, hydrogels, and polymers used to improve drug delivery. An important benefit is that the concepts learned here are an asset in other pharmacotherapy courses during the same semester, such as neuropsychiatry or oncology. Also, the course is taught in weekly-two hour classes and the slide packages provided are sufficient for studying.	
N/A	There are two problem sets, one term test, a 15 page review paper, and a 10-minute presentation covering the topic of the review paper. There was no final exam during the exam schedule. Although equations are needed for calculations in problem-sets and tests, the focus is on understanding them holistically. As well, they do not need to be memorized as they are always provided. Topics for the review paper can include gene and siRNA drug delivery, ultrasound technology, and feedback controlled insulin delivery systems. Overall, despite the consistent workload throughout the semester, success in the course was very achievable and it was a worthwhile course for preparation for future practice in pharmacy.	
	PHM325H1: INDIGENOUS ISSUES IN HEALTH AND HEALING	
A-	This course is very different from what students are used to with the pharmacy curriculum. You need to attend every lecture, there is a weekly reflection you need to submit that will likely be related to one of the topics we have guest lecturers for. Attendance is graded for that reason and you get participation marks for submitting the weekly reflections. No midterm or final exams but the papers we are required to submit are pretty hefty and do require a substantial amount of research. This is a pretty cool course that opens your mind to the idea of healing so go into it with an open mind and make sure you allocate enough time for the papers that are graded for your course grade. This is a very popular course so make sure you log onto ACORN bright and early as spots will fill up very quickly!	
PHM	327H1: MANAGEMENT, LEADERSHIP, AND ENTREPRENEURSHIP SUMMER INTENSIVE ELECTIVE	
Honours /Pass/ Fail	This is a 5-day intensive course structured around different topics and activities relating to management, leadership, and entrepreneurship. It was designed as a management training course similar to those offered at hospitals, corporations, and not-for-profit organizations. Classes will begin at 9:30 am in the morning and 1pm after lunch. Full attendance during all 5 days of the summer intensive program is required, as content will build from day-to-day. In addition to attending, the expectation is that students will participate in group-based learning activities and discussions. The course features an array of influential speakers from the Canadian and Ontario health care systems including hospital executives, CEOs, former politicians, and industry leaders with whom you will get a chance to network.	
	In terms of evaluations, this course is Honours/Pass/Fail. It includes daily pre-class assignments as well as in-class assignments worth (40% in total). 10% of your mark will be based on your in-class contributions. The final assignment, a case-study of a management or leadership scenario encountered in pharmacy, is due on the last day and accounts for 50% of your overall grade.	

Course Average	Course Description
	PHM383H1: ANTIMICROBIAL STEWARDSHIP
A-	This course is very different from the ID pharmacotherapy course in second year, you will not learn any therapeutics. Instead, this course gives an overview of antimicrobial stewardship concepts such as the implementation of AMS interventions, diagnostic stewardship, as well as an emphasis on quality improvement and project management. The second half of the course focuses on the application of AMS in various settings such as critical care, primary care, long-term care, community, and public health. The evaluations of the course consisted of a midterm (20%), final exam (35%), individual assignments (35%), and a Dragon's Den group presentation (10%). As the class size was relatively small, the majority of lectures were delivered in-person. This course is taught by Linda Dresser and Mark McIntyre who facilitated interactive class discussions and were a great dynamic! There were also lectures by guest speakers from different backgrounds. The Dragon's Den group presentation integrates concepts learned in the course and provides a great opportunity to get feedback from a panel of experts in the hospital field. I highly recommend this course for students interested in pursuing a career in hospital pharmacy as stewardship will come up along your way, either in your APPE rotations, hospital residency, or in practice.
	PHM389H1:RESEARCH PROJECT
N/A	This course is offered in both the Fall and Winter terms. It requires you to reach out to professors who hold SGS appointments in the Department of Graduate Pharmaceutical Sciences. Once you have found a supervisor who has space and enthusiasm to take you on; you will have the option of completing the research project in the fall or in the winter terms. It is recommended you begin reaching out to professors at least one semester in advance. The course is structured like an independent research project, where you work in a professor's lab and complete a project - starting with a proposal, midterm report on your activities and a final report which is similar to a research paper submission to a journal. You have the option to complete a wet lab or a dry lab/literature review type project; the former notoriously requires much more hours. The quality of this experience will depend a lot on your supervising professor. A lot of the learning is self-guided and so you will learn only what you work to learn; but you may also get a publication out of it!



Course Average	Course Description
	PHM350H1: PHARMACOTHERAPY IN AMBULATORY CARE
B+	This class covered diabetes, hypertension, pain, afib, stroke, COPD, heart failure, stable angina, and drug interactions with weekly integrated cases. The first half of the class reviewed the topic of the week and the second discussed the integrated case for which there was a weekly documentation assignment. Only 5 out of 9 documentation assignments count towards your final grade (top 5) and it is easy to do well on as the case is discussed in class. Overall it is an incredibly helpful course to review commonly seen medical conditions with more real-life cases. Course Breakdown: documentation assignments 50%, midterm 25%, final 25%
	PHM351H1: PHARMACOTHERAPY IN INSTITUTIONAL CARE
В	Institutional PCT is a versatile course that will prepare you for a variety of key conditions that you will typically see in hospital practice, including VTE prophylaxis, fluid/electrolyte management, acute ACS management, total parenteral nutrition, an introduction to critical care, and emergency pharmacotherapy. The difficulty and workload of this course falls roughly in line with previous pharmacotherapy courses. The evaluation style of this class includes weekly reading quizzes (5%), condensed care plans called "chart notes" (10%), with the best 2 of 3 being marked, group chart notes on integrated cases (10%), a high-stakes midterm (30%) and non-cumulative final exam (45%). I would strongly recommend this course if you are considering a career in hospital practice or would like a strong foundation for institutional APPEs. Since the nature of these cases vary widely from your typical community disease states, this course will help to prepare you to adapt your therapeutic approach for a different clinical environment.
	PHM352H1: PHARMACOTHERAPY IN OLDER ADULTS
B+	The topics covered in this PCT course include falls & fractures, palliative care, delirium, frailty, ageism, polypharmacy, palliative care, and Parkinson's. Aside from this you'll review old-school material like depression, diabetes, hypothyroidism, UI, BPH, and infectious diseases but with a focus on how these affect older adults. The course consists of a 20% written assignment, a 20% creative assignment that involves teaching core concepts, and a 50% final exam with the remaining 10% being participation marks.
	PHM353H1: PHARMACOTHERAPY IN CRITICAL CARE
N/A	This course focuses on medications, lab values, medical devices and disease states seen in the ICU. Examples of topics include shock, sepsis, renal failure and traumatic brain injury. The material is very interesting but quite dense. There are several readings given as well; however, that material is rarely tested and you can get by with just a quick skim. You are given plenty of time on the exams; however, they are quite difficult and it can be challenging to do well even with Dewhurst plenty of preparation. On the bright side, there are 2 open book seminars, 3 open book quizzes and a critical appraisal paper which can bring up your mark and are marked very leniently by Norman. It is by no means easy, but the material was very interesting and helped you to integrate concepts learned throughout the years and apply them to new situations. The class size is very small which also means there is a lot of support for students from Norman.

Course Average	Course Description
	PHM354H1: PHARMACOTHERAPY IN PEDIATRICS
A-	Pediatrics is a good course to take if you are interested in learning more about the pediatric population. Topics covered include pediatric medicine, neonatology, drug information, compounding, PK, TDM, nutrition, GERD, vaccines, ASP, allergies, solid organ transplant, HF, depression, and PICU. This course features various guest lecturers who are experts in the field. The professor is open to answer any questions you may have. The course load starts off moderate and then gets heavier in the later stages of the course with more complex topics. The midterm exam (35%) was multiple choice and short answer questions. With the questions being based on the learning objectives presented in the lecture slides. There are 2 individual assignments which involved cases and drug information questions that require some research to answer (worth 25% in total). Lastly, the final exam was a mix of multiple choice and short answer (40%).
	PHM355H1: PHARMACOTHERAPY IN WOMEN'S HEALTH
В	This course was an engaging and informative experience that focused on women's health. Evaluations included a midterm, an assignment, and a non-cumulative final exam. The topics discussed were highly relevant, with some overlap from the second-year endocrine PCT course. Rather than relying on slides or PDFs, Professor Brown used a blackboard, which fostered a more engaging learning environment. The exams were mostly short answer with a very small number of MCQs on the final. To do well in this course, it is important to attend classes and take detailed notes. The tests were fair for those who regularly attended class, and students were always encouraged to ask questions for clarification.
	PHM360H1: PERSONALIZED MEDICINE
A-	In the words of Mary J. Blige, let's get crunk cuz Mary's back! Dr. Erclik's personalized medicine course provides students with an indepth exploration of wellpersonalized medicines. Topics of discussion will include pharmacogenetics, new vaccine technology, and targeted therapies such as the ones encountered in oncology. The evaluation style is straightforward and includes the following: three case studies, three participation quizzes following a tutorial after each case study, a midterm, and a final exam. Both exams will be short answers only. While the course content can be dry, it is overall very straight-forward. The evaluation style and course expectations are very simple and fair. Be sure to pay attention to what Dr. Erclik will expect for her exams and you'll do great!
	PHM361H1: LATEST DEVELOPMENTS IN DRUGS AND BIOLOGICS
N/A	This course provided an overview of the drug development process and a good exposure to the newest approved drugs on the Canadian market. The first several lectures are provided by Professor Kotra and are focused on the discovery and development of biologics, small molecule drugs, and cell therapies. Student group presentations comprise the remainder of the lecture hours. Students are asked to form groups of 5-6 to provide a 45-minute presentation on an assigned newly approved drug on the Canadian market. The presentation is evaluated based on a 10% group mark and a 10% individual grade. Try to memorize your component of the group presentation, as the professor uses this as a measure for your individual presentation score. The midterm (30%) and cumulative final exam (50%) evaluate major concepts discussed in class and the material from the group presentations. The exams consist of 5-8 short answer questions. Pay close attention to the professor's questions at the end of group presentations, as they are often tested on exams. You will be asked to provide explanations of major concepts, rather than small details. The professor often links concepts from the presentations to what was learned in his didactic lectures to assess understanding on exams. Students often do well in this class, and it is a lighter course load.

Course	
Average	9

Course Description

PHM362H1: ASSESSING THE BIOAVAILABILITY AND BIOEQUIVALENCE OF MEDICINAL DRUG PRODUCTS

Α-

This course is designed for individuals interested in research, industry, and/or regulatory affairs. Throughout the course, students learn about the different steps in planning a clinical trial, from preparing a study design to running the PK analysis to drafting a quality assurance report. Dr. Dubins teaches the material thoroughly and provides very detailed examples. Although students will do basic programming with Excel and R studio, Dr. Dubins provides sample spreadsheets, coding, and examples which he walks the class through step-by-step. Assessments include 4 problem sets, a midterm, and a final exam. Problem sets test students' knowledge to apply lecture material and focuses on the ability to use online programs (R Studio). The exams test on understanding course concepts and definitions as well as various calculations. In conclusion, this course provides students with many practical tips for working in the pharmaceutical industry.

Course Breakdown: Assignments (5%), Problem sets ($4 \times 11.25\% = 45\%$), Midterm (25%), Final (25%)

PHM370H1: COMMUNITY PHARMACY MANAGEMENT

Α-

In this course you will, in essence, learn the ins and outs of community pharmacy management. This includes pharmacy operations, purchasing/inventory management, financing, ownership models etc. You will get an overview on how a community pharmacy is built from the ground up and how to conduct the business as a whole from hiring to formulary access to dispensing fees. Each week covers a different topic that is accompanied by several readings to supplement the material. This course is recommended for individuals looking to own their own pharmacy one day and Professor Morrison does a good job of breaking down each component of the business so that you can have a head start when you graduate.

Course Breakdown: Interview assignment (15%), MCQ midterm (20%), Business plan (35%), and Final MCQ exam (30%). The interview assignment involves conducting and transcribing your own interview with a pharmacy manager, and then summarizing your main takeaways. The business plan involves selecting a location for a pharmacy and establishing a brand, a mission statement, and conducting market research. The midterm and final cover the lecture material and readings. The lectures alone are not enough, and one must do the readings to do well on the midterm and final.

PHM371H1: INSTITUTIONAL PHARMACY PRACTICE MANAGEMENT

В

This course examines the organizational intricacies of institutional pharmacy and provides insight into the opportunities for leadership outside the typical dispensary and clinical roles. Topics include but are not limited to: medication management systems, hospital accreditation, change management, patient and medication safety, and education in hospital pharmacy. The course also has a multitude of guest lecturers in leadership positions at their respective institutions, as well as a leadership panel where students can ask about their career journey and advice on professional development.

The course consists of a midterm (35%) and three assignments: one involving the composition of a formulary submission (15%), one requiring the analysis of a medication incident (20%), and one where the student plans for drug shortages (30% and is functionally a final exam). There are workshops to help review concepts and allow students to ask questions about the associated assignment.

This course is particularly helpful for developing the knowledge and skills for managing a hospital pharmacy department. The workload is fair and it is recommended that you attend the in-person sessions to do well in the course. If you're interested in pursuing a leadership role in hospital pharmacy, pay special attention to this course!

Winter Term Elective Courses

Course Average	Course Description	
	PHM322H1: PATIENT/ MEDICATION SAFETY	
A-	This class is like if you took medication and safety and combined them into one course. It covers various topics surrounding safe medication practices in the pharmacy, both system and person-based. Lessons focus on the reporting of medication incidents and adverse drug reactions, drug interactions and how to manage them, various methods and models for error analysis on small and large scales, and the organizations involved with these processes. In addition to recorded lectures, the course consists of workshops which are held approximately every other week, following a shortened live lecture, and are run by ISMP Canada facilitators. These workshops are mandatory for students to attend, though not marked, and each one teaches a different error analysis method. Completing the workshops results in attaining 3 different ISMP Canada certifications which you would otherwise need to pay for (and are expensive!). The course breakdown includes a midterm (20%), final exam (40%), group project (10%) and written final report (30%). Weekly pre-readings are testable and many questions were included on examinations (however, Dr. Ho is very clear on exactly what you should focus on). Overall, while the content could be considered slightly dry, Dr. Ho definitely one of kindest and most caring professors you will ever meet.	
	PHM381H1: MEDICAL IMAGING FOR PHARMACISTS	
A-	This is an easy and interesting course that talks about the principles and applications of medical imaging including X-ray, MRI, ultrasound, mammography, CT, PET, and SPECT. The first 4 weeks are didactic lectures about the basic principles of how these technologies work. The next 4 weeks is applying the knowledge and using imaging to recognize disease states from healthy states. The rest of the course is guest radiologists from different fields who talk about their work and how they use medical imaging, which is very interesting to listen to. Only the first 8 weeks of material is tested; the guest lectures are not tested. All the testable material was provided in the slides with no additional required readings. Overall, the course load was very light and Dr. Reilly was very helpful and supportive throughout the term. Course Breakdown: Midterm (40%), Final (60%)	
PHM382H1:NANOMEDICINES IN ONCOLOGY		
N/A	Note: Course was not offered during the 2022-2023 or 2023-2024 academic year. This course covers the development and application of nanomedicines in oncology, focusing primarily on the challenges associated with drug delivery and cancer heterogeneity. Students will learn about advanced nanotechnology platforms, such as liposomes and polymer-drug conjugates, as well as emerging innovations in the field of nanomedicine. The course also emphasizes the use of imaging, theranostics, and critically evaluating literature.	
PHM384H1: TEACHING AND LEARNING		
B+	This class is incredible if you'd like a behind the scenes look at MTM and general considerations for lecture and content creation. Generally, the content is not heavy and class time is mostly taken up by discussions which does mean attendance is mandatory. 10/10 would recommend. Course Breakdown: One written assignment 25%, two reflections 15% each and a cumulative final exam (not heavy content!) 45%.	

Course Average	Course Description
	PHM385H1: DIABETES CARE
В	I won't sugar coat it, this course is tough. However, diabetes is becoming more and more prevalent, which makes this course an important course for those who are interested in specializing in diabetes or aiming for a Certified Diabetes Educator certificate. Unlike the second-year snippet of diabetes in PCT3, this course provides in-depth learning of diabetes topics, including exercise, nutrition, foot care, diabetes devices, travel, insulin dosing, special situations in pediatrics, pregnancy, and older adults, and more! Professor Halapy structures the course in a very organized and logical manner, consisting of mainly didactic lectures with some guest lecturers. He's very approachable and open to and provides many opportunities for him to answer questions from students throughout the term. This course consists of one test (15%), one midterm (35%), and a final exam (50%). It is presented as a cumulative course, but the contents of the final exam are much more heavily weighted to topics presented after the midterm. Tips for Success: Make sure you stay on top of the lectures and begin reviewing for the tests ahead of time, as there is a lot of course content that you need to cover. If you are able to make condensed notes for yourself, it may aid you in your studying. Review your notes with a thorough understanding of the topics in class. If you get the opportunity to review your midterms, I recommend you to
	do so, since Professor Halapy is very thorough in helping you understand where you went wrong and what you can work on. Although this course may be heavy in its content, it's very rewarding with the knowledge that you are given, and will no doubt help provide you with the tools you need to help your patients with diabetes in the future. PHM386H1: MENTAL HEALTH AND ADDICTION
B+	This course discusses various topics related to mental health including but not limited to stigma, ADHD, autism, personality disorders, and suicide risk assessments. It is a third-year elective course that students can choose to take in their second semester. Much of the content can be seen as an extension of PHM 302 with far less complex pharmacotherapies or therapeutics. Evolutions for this course consist of a midterm exam, two reflections on course materials up to that point for participation, an "In The News" assignment posted on the class discussion board, and a final exam. The midterm exam consists of both short answers and multiple choice. What can make the multiple choice questions difficult to answer as there may be multiple "correct" answers for the case that is presented, but it takes careful reading to choose the "best" answer. The short answers rely more on the student's ability to use careful language that answers the question fully but also connects to topics discussed in the course like stigma so that there is no stigmatizing language in the answer.
D	I had a great experience with this course because I found much of the material interesting, not heavy on therapeutics, and relevant both within and outside of my clinical practice. Some tips for success: If you want to be successful in this course it is important to participate. Much of the course is what you take from it yourself. Because mental health is an increasingly prevalent topic in our day-to-day lives, it's important to be able to put yourself in a patient's shoes and know how to approach that kind of conversation. Therefore, actively participating will make it easier to understand the approach to the conversations and the kind of impacts certain words or misconceptions can have on patients. This participation will also translate to success in the course material as well because you will have a better understanding of what approach you should take. Lastly, this is a third-year elective, so the best way to ensure you are successful is to decide if the subject matter presented in the course is something that interests you and can be relevant to your pharmacy practice.

Course Average	Course Description
	PHM387H1: GLOBAL HEALTH
A-	In this course, pharmaceutical policy on a global scale is discussed. PHM 320 with Professor Kohler in the fall semester is a good primer for this course but is more focused on global health policy whereas this course focuses on specific issues pertaining to global health. In the first half of the course, Linda and Doret and guest lecturers cover the foundations of global health, with and Linda Dresser topics including: domestic health policy issues, health disparity, governance, corruption, and medication safety in low resource countries. The second half of the semester involves more discussions with guest lecturers. This course does include five case workups which must be completed based on the required pre-readings. A reflection is to be submitted afterwards based on the content discussed. However, only three of the reflections are graded. In place of a midterm, we wrote an orientation manual for a student completing an internship in a specific low-middle income country. The final paper was a grant proposal to strategic stakeholders in the efforts of improving global health in a low-middle income country. A group presentation was also completed towards the end of the semester.
PHM	388H1: SELF-CARE PERSPECTIVES AND PHARMACOTHERAPY FOR MINOR AILMENTS
A-	As a continuation of the second-year minor ailments course, the third-year course touches on some other minor ailments topics, including emergency contraception, hemorrhoids, headaches, other women's health topics, pediatric illnesses, motion sickness, and more! Despite the heavy course load of the second-year course, the third-year course has a lighter course load and Debra is very accommodating to students and their needs throughout the school term and is open to discussing changes to course logistics if you ask. The course structure generally involves didactic lectures with a mix of workshops, similar to the second-year course. Each week, there may be up to two topics that are discussed. However, the workshops are much more relaxed and focused on your learning and understanding of the topics. As someone who disliked the second-year course, I found the third-year course very rewarding and engaging, so don't let your prior opinions sway you! Tips for Success: Attend classes and workshops! Debra's tests are very fair, and you can easily do well in this course if you pay attention and keep up with the material. There may be quizzes for the lectures and workshops, but they are fair so long as you pay attention during class. Make sure to submit your preparation notes for workshops before your workshop day! There also may be opportunities for bonus marks throughout the course, so keep an eye out! Pre-readings are assigned before each workshop or lecture that you can reference for your studies.
	PHM389H1: RESEARCH PROJECT
N/A	This course is offered in both the Fall and Winter terms. It requires you to reach out to professors who hold SGS appointments in the Department of Graduate Pharmaceutical Sciences. Once you have found a supervisor who has space and enthusiasm to take you on; you will have the option of completing the research project in the fall or in the winter terms. It is recommended you begin reaching out to professors at least one semester in advance. The course is structured like an independent research project, where you work in a professor's lab and complete a project - starting with a proposal, midterm report on your activities and a final report which is similar to a research paper submission to a journal. You have the option to complete a wet lab or a dry lab/literature review type project; the former notoriously requires much more hours. The quality of this experience will depend a lot on your supervising professor. A lot of the learning is self-guided and so you will learn only what you work to learn; but you may also get a publication out of it!

U of T alumni and pharmacy students helping to bridge the healthcare Gap across Ontario: The Access to Care Program

The Current Challenges in Access to Healthcare

Access to primary healthcare is a significant concern in Ontario, particularly for students and residents struggling to find a family doctor. This shortage leads to fragmented care, increased reliance on emergency services, and poorer health outcomes. According to the Ontario Medical Association, approximately 2.3 million Ontarians are currently without a family doctor—a number that could rise dramatically if the issue is not addressed.

International students face additional obstacles, such as unfamiliarity with the healthcare system, language barriers, and limited understanding of their insurance coverage. The University Health Insurance Plan (UHIP) provides similar benefits to the Ontario Health Insurance Plan (OHIP). However, many international students lack knowledge on how to effectively use these benefits. The same applies to numerous out-of-province and in-province students. As a result, many students may turn to emergency rooms for conditions that could be managed by a primary care provider, increasing healthcare costs and putting additional strain on emergency services.

The Access to Care Program: A Step Forward

In response to the pressing issue of healthcare accessibility, some pharmacies across Canada have started participating in the Access to Care Program, offered by UofT's healthcare startup tech company, MedEssist. Nicole Lim Tung (1T8), pharmacist at MedEssist, was one of manywho helped build the program.

"We've been able to leverage technology to empower pharmacists in partnership with NPs and MDs to prescribe for more conditions such as birth control or HPV vaccination," says Nicole. "More than one in five Canadians do not have accessto a primary care provider, and I believe pharmacists are well positioned to offer immediate support for preventative care."



Dr. Zubin Austin, professor at the Leslie Dan Faculty of Pharmacy, shared his excitement around the program: "We're proud and so pleased to see our Leslie Dan Faculty of Pharmacy alumni working collaboratively and creatively to solve problems in Canadian healthcare and to improve the lives of patients."

Insights from Healthcare Providers and Students

U of T Pharmacy alumni and pharmacist Kristen Watt mentions, "I'm excited about it. I think it's a unique way to leverage the pharmacist's skills within the current framework of the legal allowable limits. I think pharmacists are highly underutilized healthcare practitioners, and this program leverages our therapeutics as well as the knowledge of our patients in front of us. This will allow our patients to access care. So it's really exciting that we're working in unique ways to try and find solutions for patients to access care."

Pharmacy students completing their APPEs and co-op rotations with MedEssist have had the opportunity to work closely on this program.

Aqsa Ali, a 4th-year pharmacy student at the University of Toronto, says, "This approach is a unique way to fully utilize pharmacists' skills within the legal framework. Pharmacists are often underutilized in healthcare, but this program makes the most of our expertise in therapeutics and our direct knowledge of patients. It's exciting to see new methods being developed to improve patient access to care."

Rahima Shokoya, 4th year pharmacy student at the University of Waterloo states, "It's been rewarding helping the participating pharmacies with this program. Close collaboration in healthcare has always been important and that's where I see healthcare thriving."

Natalie Chaput, a 4th-year pharmacy student at the University of Toronto, believes the program strengthens the role of pharmacists as primary healthcare providers. "It allows us to offer more accessible and extended care to our patients, highlighting the vital role we play in our communities. For new graduates, this initiative is a huge opportunity, inspiring us to pursue our careers with greater autonomy and impact."



Benefits to U of T students

One of the participating pharmacies in the program is Everest Whole Health Pharmacy, conveniently located on campus at Victoria College near Queens' Park. It serves as a familiar hub for students living on or near campus, offering services such as treatment for minor ailments, vaccinations administration including flu COVID-19 and shots. medication management and Travel Health Consultations. Kumail Remtulla, owner and pharmacist says "The Access to Care program has allowed us to be accessible to patients during times of need. For instance, we were able to help a student who recently arrived in Canada and urgently required a prescription for birth control. We looked up the Canadian Equivalent Medication and were able to prescribe it through the Access to Care initiative. Our goal is simple: to ensure patients receive timely care whenever they need it. Even the smallest efforts can make a significant difference."

Conclusion

Overall, improving our healthcare system is crucial. The pandemic highlighted the flaws in the current system, and there is still much to be done to make healthcare equal and universal for all. The Access to Care Program is one way healthcare professionals are working to bridge the healthcare gap. By streamlining access to primary care, the program helps individuals access care more easily, leading to improved health outcomes and relieving broader systemic pressures on the healthcare system.





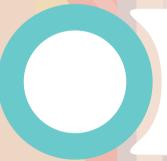


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