

Volume 19, Pre-Issue 2017-2018

# MONOGRAPH

The Voice of the Pharmacy Student



## In this Issue:

Editors' Address:  
Meet the  
Monograph Co-  
Editors **2**

UPS Corner:  
A message from  
your UPS  
Pres and VP **3**

UPS Who's Who:  
Meet your UPS  
Council **4**

The Anticalendar:  
Insight on courses  
from upper **4**



## The Monograph Team

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TBD

### PHOTOGRAPHY

Pharmakon

*The Monograph would not be made possible without our dedicated team of writers and readers like you!*



## EDITORS' ADDRESS

# Hey Pham!

We would like to take this opportunity to introduce ourselves. We are Narth and Ersilia, second year students at the Faculty of Pharmacy, and we are excited to be the new Co-Editors of the Monograph for this year!

We are happy to welcome the incoming class of 2T1, and extend a warm welcome back to the classes of 2T0, 1T9, and 1T8. We wish everyone a wonderful year filled with lots of pharmacy-related learning and of course some fun in between those care plans! This year, you will see familiar features inside the pages of the Monograph as well as some new ones!

### We are returning with:

- Online Access-find the latest issues of the Monograph online
- Monograph Stand-found in front of PB150, where you can leave used copies of the Monograph to share with others
- Contests- enter our contests for the chance to win a prize!

### New to the Monograph are the following features:

- Interviews- gain insight into different fields of pharmacy including clinical practice and research
- Comics- check out the work and EPE experiences of our phriends in this fun format!
- Re-vamped website- under construction

Last but not least we thank you, our readers, for taking the time to look through the Monograph's 2017-2018 Pre-Issue. In this special issue you will find the UPS "Who's Who," which introduces members of the Undergraduate Pharmacy Society, as well as an "Anti-Calendar" for this school year. In the Anti-Calendar you will find a summary of first, second, and third year courses from the perspective of fellow pharmacy students. We hope this provides you with helpful insight into your classes.

A big thank you to all those who contributed to the Pre-Issue and especially to Pharmakon for the great photos!

Until the first issue,

*Ersilia D'Andrea and Narthaanan Srimurugathan*

Monograph Co-Editors 2017-2018

monograph@uoftpharmacy.com

## UPS ADDRESS

# Welcome Back Pharmacy Phamily!

To our new phamily, the 2TIs, we hope you had a memorable Phrosh Week! The laughter, joy, and the special connections you've made this week will be precious for a lifetime. A huge round of applause goes out to Julia, Matthew, and the rest of the Phrosh Planning Committee for working tirelessly all summer to bring the week to fruition.

To our upper years, welcome back! We hope you had an amazing summer, whether that might have included summer placements, travels abroad or just plain relaxing at home with family and friends. We cannot wait to share another incredible year together!

The Undergraduate Pharmacy Society (UPS) has been working hard all summer to enhance your student life for the upcoming year! Some notable events to look forward to this semester include the U of T vs. U Waterloo Soccer Cup, CAPSI Competitions, Phollies Talent show, Charity Week, Intramurals, Lunch and Learns, UPS Holiday Party and much more! Stay tuned for our Calendar of Events in Issue #1 of the Monograph for a more complete list!

To make the most of your time here at the Faculty, we encourage you to participate in events,

intramurals, clubs, and other extracurricular activities that may interest you. While making meaningful connections and relationships, you will also develop both professionally and academically. Not to mention, your participation is recognized through our UPS Points System!

If you ever have any questions, feel free to reach out to us either personally or at our email, [ups@uoftpharmacy.com](mailto:ups@uoftpharmacy.com). Say hi if you see us around!

Looking forward to an incredible year with you; may it be the best one yet ;)

Cheers  
*Steven and Onella*  
UPS President and Vice President  
[ups@uoftpharmacy.com](mailto:ups@uoftpharmacy.com)





# UPS WHO'S WHO

The Undergraduate Pharmacy Society (UPS) Council is a group of thirty two pharmacy students and two staff advisors. Its purpose is to serve pharmacy students through social, athletic, academic and professional events, to represent the voice of pharmacy students at the University of Toronto, to advocate for pharmacy students at the university, and to promote a positive image for pharmacy students through community involvement.



*"Positive, Competitive, Restorative"*

STEVEN SHAO, 1T9  
PRESIDENT

**His Role:** Leading a team of over 30 executives to represent you and to better your student experience.

**Slogan for his Life:** Do the uncomfortable, Live the unimaginable.

**Contact:** ups@uoftpharmacy.com

*"Ambitious, Approachable, Friendly"*

ONELLA PEREIRA, 1T9  
VICE PRESIDENT

**Her Role:** Ensuring that the UPS council works efficiently and smoothly to provide engaging social, academic, and professional activities! In particular, the VP plans the Orientation Banquet for 2T1s, chairs the Student Initiative Fund and is a member on the Points and Awards Committee. The VP also organizes the Annual Awards Night and Ontario Pharmacy Student Integrative Summit in March!

**Slogan for her Life:** Take every chance. Drop every fear.

**Contact:** ups@uoftpharmacy.com



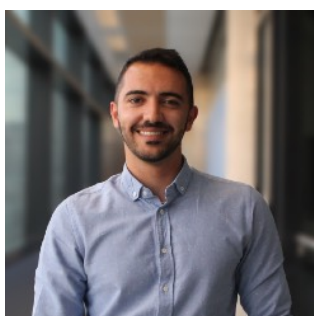
*"Un petit croissant"*

FARAZ RAZZACH, 1T8  
PAST PRESIDENT

**His Role:** Having already assumed the role of UPS President, he currently oversees the provision of academic, athletic, social and professional events and activities in an advisory capacity.

**Slogan for his Life:** Carpe Diem.

**Contact:** pastpres@uoftpharmacy.com



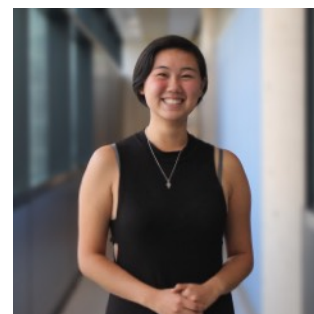
*"Friendly, Talkative, Approachable"*

PAMELA IP, 2T0  
EXECUTIVE SECRETARY

**Her Role:** The one that is in charge of your UPS points and keeping all our cool pharmacy events organized :)

**Slogan for her Life:** Eat well and prosper

**Contact:** secretary@uoftpharmacy.com



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# UPS WHO'S WHO

*"Motivated, Organized, Humble"*

CARMEN CHEUNG, 1T9  
SENIOR FINANCE DIRECTOR

**Her Role:** To give and receive money for UPS.

**Slogan for her Life:** Laughter is the best medicine.

**Contact:** [finance@uoftpharmacy.com](mailto:finance@uoftpharmacy.com)



*"Adventurous, Sincere, Curious"*

MICHELLE WANG, 2T0  
JUNIOR FINANCE DIRECTOR

**Her Role:** Handling the Ca\$h mon3y.

**Slogan for her Life:** Why be moody when you can move your booty.

**Contact:** [finance@uoftpharmacy.com](mailto:finance@uoftpharmacy.com)



*"Charismatic, Dedicated, Reliable"*

HATF SOHAIL, 1T9  
SENIOR EXTERNAL AFFAIRS DIRECTOR

**His Role:** Works to secure sponsorships from external organizations in order to fund UPS events. In addition, he is the Student Liaison for the Canadian Society of Hospital Pharmacists (CSHP).

**Slogan for his Life:** It's nice to be important but its more important to be nice.

**Contact:** [external@uoftpharmacy.com](mailto:external@uoftpharmacy.com)



*"I'm over this"*

AISHA CHOUDHRY, 2T0  
JUNIOR EXTERNAL AFFAIRS DIRECTOR

**Her Role:** Works together with Hatf to secure and maintain sponsorships and donations from external organizations to fund UPS events. In addition, she chairs the Community Outreach Committee and is the Student Liaison for CU Advertising..

**Slogan for her Life:** If it doesn't scare you it's not worth it.

**Contact:** [external@uoftpharmacy.com](mailto:external@uoftpharmacy.com)



# UPS WHO'S WHO

*"Lucky, Persistent, Optimistic"*



SYLVIA KONG, IT9  
SENIOR ATHLETICS DIRECTOR

**Her Role:** Coordinating all 45 Pharmacy Intramural teams to compete with the rest of U of T campus, arrange fun activities for pharmacy students and faculty members (i.e. Tug-O-War, Curling Bonspiel, Dodgeball Tournament) for the UPS cup, plan with Waterloo Pharmacy for the annual Soccer Cup and OPA Hockey Cup.

**Slogan for her Life:** Live with no regrets, do the best that you can - always.

**Contact:** athletics@uoftpharmacy.com

*"Movie Quote Enthusiast"*

ANDREW HENRY, 2TO  
JUNIOR ATHLETICS DIRECTOR

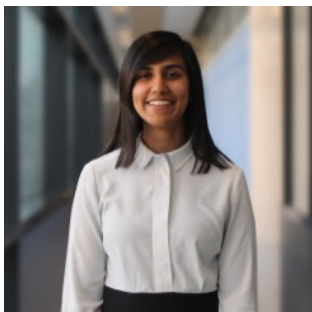
**His Role:** Organizing and leading the faculty wide athletic events such as OPA Cup, OPA soccer game, curling bonspiel and tug-of-war. He also represents the faculty for our intramural sports teams.

**Slogan for his Life:** "You miss 100% of the shots you don't take - Wayne Gretzky" - Michael Scott.

**Contact:** athletics@uoftpharmacy.com



*"Responsible, Friendly, Ambitious"*



NISHA GAJARIA, IT9  
SENIOR CAPSI REPRESENTATIVE

**Her Role:** Working with the Junior CAPSI Representative to oversee all of the CAPSI events at UofT including CAPSI competitions and Pharmacist Awareness Month (PAM). She also acts as a liaison between UofT and CAPSI National.

**Slogan for her Life:** Roll with the punches.

**Contact:** torontosr@capsi.ca

*"Genuine, Optimistic, Hardworking"*

RACHEL ANISMAN, 2TO  
JUNIOR CAPSI REPRESENTATIVE

**Her Role:** Representing U of T pharmacy students at a national level and help organize various CAPSI competitions and events throughout the year!

**Slogan for her Life:** Always strive to be your best self.

**Contact:** torontojr@capsi.ca



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# UPS WHO'S WHO

*"Devoted, Easygoing, Thoughtful"*

SAMUEL CHAN, 1T9  
EVENTS CO-DIRECTOR

**His Role:** To work with Cindy to help plan events for the student body.

**Slogan for his Life:** Striving to become better than yesterday.

**Contact:** events@uoftpharmacy.com

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*"Awkward Extroverted Introvert"*



CINDY ZHANG, 1T9  
EVENTS CO-DIRECTOR

**Her Role:** Works with Samuel to create opportunities that facilitate connections between students in a non-academic setting. They are working to spice up the school year through the Interprofessional Boat Cruise, Phollies and Semi-Formal.

**Slogan for her Life:** Live in the moment, be patient and bite off more than you can chew whenever possible.

**Contact:** events@uoftpharmacy.com

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*"Where's the food?"*

ROMAN PELYAVSKYY, 2T0  
MARKETING CO-DIRECTOR

**His Role:** Almost everything you see from Facebook event covers, to posters, to promotional materials and designs, is taken care of by Chris and Roman. They make sure to grab your attention through creative, eye-catching visuals and ads to keep you in the loop of all Pharmacy events.

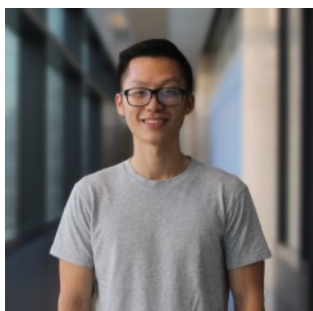
**Slogan for his Life:** Sleep more than you study. Study more than you party. Party as much as you can.

**Contact:** marketing@uoftpharmacy.com

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*"Carbon Based Memes"*



CHRIS TSE, 2T0  
MARKETING CO-DIRECTOR

**His Role:** Make things look pretty on the internet.

**Slogan for his Life:** Always do better than yourself.

**Contact:** marketing@uoftpharmacy.com

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## UPS WHO'S WHO



*"Young At Heart"*

QIqi LIN, 2To  
PHARMAKON CO-EDITOR

**Her Role:** Keeping your special pharmacy moments in photographs.

**Slogan for her Life:** What lies behind us and what lies ahead of us pales compared to what lies within us.

**Contact:** [pharmakon@uoftpharmacy.com](mailto:pharmakon@uoftpharmacy.com)

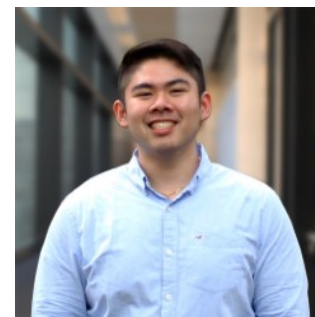
*"Live, Laugh, Love"*

VINCENT NGUYEN, 1T9  
PHARMAKON CO-EDITOR

**His Role:** Document your 2017-2018 life in pharmacy (on Facebook and in book form).

**Slogan for his Life:** Never stop exploring.

**Contact:** [pharmakon@uoftpharmacy.com](mailto:pharmakon@uoftpharmacy.com)



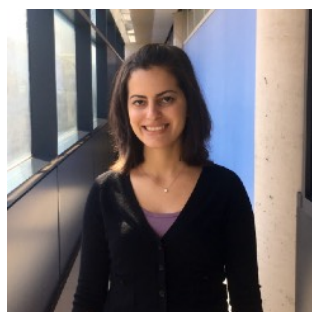
*"Sincere, Curious, Caffeinated"*

ERSILIA D'ANDREA, 2To  
MONOGRAPH CO-EDITOR

**Her Role:** Co-editing monthly publications of the Monograph student newspaper along with Nanth.

**Slogan for her Life:** There is a time & place for decaf coffee- never & in the trash.

**Contact:** [monograph@uoftpharmacy.com](mailto:monograph@uoftpharmacy.com)



*"Write for us!"*

NARTHAANAN SRIMURUGATHASAN, 2To  
MONOGRAPH CO-EDITOR

**His Role:** Helps put together the most amazing pharm school newspaper, created by the students for the students.

**Slogan for his Life:** Conquer the world today, for tomorrow is not in our hands.

**Contact:** [monograph@uoftpharmacy.com](mailto:monograph@uoftpharmacy.com)





# UPS WHO'S WHO

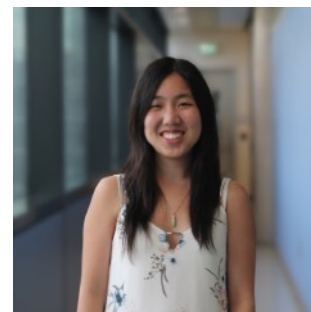
*"Hardworking, Outgoing, Nice"*

PAULINE TRAM, 2T0  
WEBMASTER

**Her Role:** To update the UPS website, manage the summer package mail out, and add people to the listserv. Moreover, send emails to the students so they are kept up to date with upcoming events and opportunities.

**Slogan for her Life:** Room with a view

**Contact:** webmaster@uoftpharmacy.com



*"Adventurous, Sincere, Curious"*

TANNER WARREN, 1T8  
OPA STUDENT BOARD MEMBER

**His Role:** Liaison between the student body at UofT and our provincial advocacy association.

**Slogan for his Life:** Always the best.

**Contact:** opa@uoftpharmacy.com



*"Cool, Calm, Collected"*

JAKOV KREZIC, 1T9  
UTSU REPRESENTATIVE

**His Role:** Liaison between the Faculty of Pharmacy and the UTSU to maintain relationship and encourage collaboration, as well as advocating for Pharmacy within UTSU.

**Slogan for his Life:** Try to hide your awkwardness and fail.

**Contact:** utsurep@uoftpharmacy.com



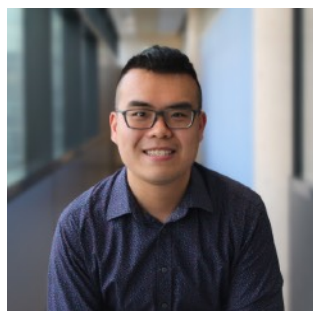
*"Ambitious, Kind, Calm"*

CLARENCE LAM, 2T0  
SPEAKER

**His Role:** Conducting all orders of business at UPS meetings to ensure that they run efficiently and productively. He also ensures that each member has the opportunity to participate during meetings.

**Slogan for his Life:** When nothing goes right, go left.

**Contact:** speaker@uoftpharmacy.com



# UPS WHO'S WHO



*"I like food"*

VIVIAN TANG, iT8  
iT8 CLASS PRESIDENT

**Her Role:** As president, she is in charge of the sale of the Therapeutic Choices Textbook and to help coordinate various events to prepare students for OSCEs and PEBCs.

**Slogan for her Life:** The trick is to not let people know how weird you are until it's too late to back out.

**Contact:** [it8@uoftpharmacy.com](mailto:it8@uoftpharmacy.com)

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*"Approachable, Dedicated, Witty"*

JOEL THOMAS, iT8  
iT8 CLASS VICE PRESIDENT

**His Role:** In charge of the faculty wide summer package sale (clothing, name tags, lanyards, and padfolios) as well as organizing Prof Auction and helping with Charity Week. Working with the iT8 president to ensure the 4th year class is well represented at UPS meetings and more.

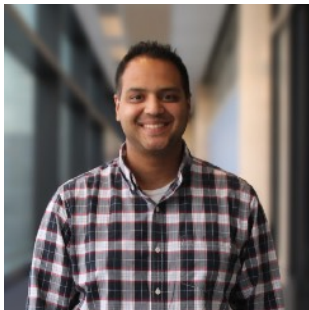
**Slogan for his Life:** Just do it...later.

**Contact:** [it8@uoftpharmacy.com](mailto:it8@uoftpharmacy.com)

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*"Funny, Thoughtful, Old"*



PAUL BANSAL, iT9  
iT9 CLASS PRESIDENT

**His Role:** As head of the iT9 Class Council, he works with each council member to provide an amazing social, academic and athletic experience for all of the iT9s. He also represents the iT9s in front of the Dean, other faculty members, and external organizations.

**Slogan for his Life:** Check twice, dispense once.

**Contact:** [it9@uoftpharmacy.com](mailto:it9@uoftpharmacy.com)

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*"I take pics"*

STEVEN GUAN, iT9  
iT9 CLASS VICE PRESIDENT

**His Role:** Representing the class of iT9 along with the class president.

**Slogan for his Life:** If anything bad happens it's not my fault, it's fate.

**Contact:** [it9@uoftpharmacy.com](mailto:it9@uoftpharmacy.com)

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# UPS WHO'S WHO

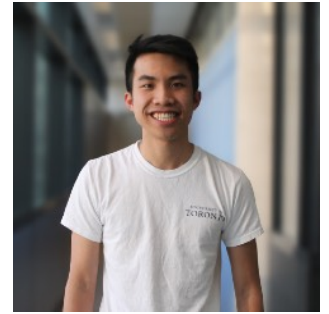
*"huh what's happening?"*

MATTHEW LUU, 2To  
2To CLASS PRESIDENT

**His Role:** As Class President, he has the honour of representing the Class of 2To to both the Faculty and Undergraduate Society, as well as supporting class-wide and school-wide events!

**Slogan for his Life:** 6-o and go.

**Contact:** 2to@uoftpharmacy.com



*"Bubbly, Weird, Panda"*

JULIA LIU, 2To  
2To CLASS VICE PRESIDENT

**Her Role:** Planning phrosh for the 2TIs, organizing CPR, charity week, and overseeing events facilitated by our 2To class council!

**Slogan for her Life:** Be kind.

**Contact:** 2to@uoftpharmacy.com

2Ti CLASS PRESIDENT *and* 2Ti CLASS VICE PRESIDENT:

**To Be Determined**



SANDRA MEJIA  
FACULTY ADVISOR



KENNY TAN  
FACULTY ADVISOR

# ANTICALNDAR

The Anti-Calendar is the non-official handbook for all the required and elective courses in the PharmD program. Written by students themselves who have taken these classes, it offers candid insights and practical advice about learning the course content, studying smarter, and passing (and acing!) exams. So without further ado, grab your coffee or tea and take a look at our 2017-2018 edition of the Anti-Calendar:

*Please note: The class averages provided are from the 2016-2017 academic year, and thus may not be applicable for this year.*

## First Year

Farhat Hossain

### Fall Semester

#### **PHM110 – Health Systems I**

*Class Average: B+*

This course gives an overview of the Canadian Health Care system with a focus on pharmacy practice. The course consists of two written assignments, a midterm, and a final exam. There is a guest lecturer every week for this course. Completing the readings before attending the guest lectures is helpful. Regarding the written assignments, the first one is a critical reading summary while the second assignment is an argumentative essay.

**Tips for Success:** Consulting the Health Resources Writing Centre (be sure to book well ahead of time!) and peer-editing your submissions are very helpful. The final exam is cumulative.

#### **PHM113 – Pharmacy Informatics**

*Class Average: A-*

Pharmacy informatics discusses how to use key pharmacy resources that prove to be very useful in MTM and later on in your EPE placements. In this course, you will learn how to look for key drug information in print sources such as the CPS (Compendium of Pharmaceutical Science) and in electronic sources such as Lexicomp, the Ontario Drug Benefit (ODB) Formulary, and RxTx. This

course consists of a midterm, a timed assessment, and a final exam. The timed assessment consists of using the pharmacy electronic and print resources to answer questions regarding medications. The course is pretty light in terms of lecture content.

**Tips for Success:** To prepare well for the timed assessment, make sure that you are comfortable using the print CPS and online pharmacy resources. The final Exam is cumulative.

#### **PHM130 – Pharmaceutical Calculations**

*Class Average: Pass/Fail*

Pharmaceutical Calculations is an introductory course covering basic calculations that one would experience when working in a pharmacy. If you have already had some experience working in a pharmacy, these calculation-based problems will be familiar to you. The course consists of two midterm exams and a final exam. The second midterm exam requires a grade of 100% to pass but not to worry, if you have done some practice and double check your work during the exam, you will be fine. There is also an opportunity to retake the second midterm in case the required grade is not achieved. The final exam took place in November for the first time this year, just so you have one less exam to worry about in December. The final exam is also cumulative.

**Tips for Success:** The midterm and final exams are all open book, so it may be beneficial to keep your notes organized!



# ANTICALEAR

## PHM142 – Metabolic Biochemistry and Immunology

*Class Average: B+*

Dr. Henderson covers the first half of this course and Dr. Hampson covers the second half. This is one of the more content-heavy courses, so it is important to attend lecture, take notes, and study the lecture slides (especially the highlighted yellow words on Dr. Henderson slides). Dr. Henderson also offers a 4% bonus presentation, but be sure to sign up quickly as the spots fill up quite fast! Material from selected presentations is testable on the midterm and final. The first midterm exam is entirely short answer. The final exam consists of matching, fill in the blanks, and short answer, but is not cumulative.

**Tips for Success:** Do the best you can to incorporate as much detail in your responses as possible. With Dr. Hampson's material, it is important to not only focus on the material presented on the lecture slides but to also focus on the supplemental readings in order to do well on his section.

## PHM144 – Pharmacokinetics

*Class Average: B+*

This course covers topics such as the fate of drugs in the body (how they are absorbed, eliminated, excreted, etc.), how to determine drug dosing regimens, and mechanisms of drug-drug interactions. The lecture content is divided among five different lecturers with tutorials and workshops. The assessment of this course consists of 4 workshop quizzes, one midterm, and a cumulative final exam. The workshop quizzes are multiple choice while the midterm and final exams are mainly short answer with a few fill in the blank or multiple choice questions. The workshop quizzes, midterm, and final exam short answer questions are application-based problems requiring you to consult different mathematical models as appropriate to solve the problems.

**Tips for Success:** Completing and understanding the workshop and homework problem sets, past midterms, and final exams are a good way to practise

how to solve the various types of problems you will encounter on tests.

## PHM145 – Human Histology and Anatomy

*Class Average: A-*

Dr. Sun teaches the first half of this course covering topics such as histology, connective tissue, lymphatic system etc., while Dr. Hossein covers the second half of the course covering anatomy topics such as the cardiovascular system, respiratory system, and reproductive system. Dr. Sun likes to supplement his lecture material using diagrams to help students understand the content better, however the diagrams are not tested on the midterms. The course consists of two midterms, all multiple choice. The midterms and final exam are not cumulative, however the second half of this course is a lot more content-heavy compared to the first half.

**Tips for Success:** It's important to understand the main topics and to study the lecture slides. Be sure to pay attention to the multiple choice questions Dr. Sun poses in class!

## PHM146 – Fundamentals of Pharmacology

*Class Average: B+*

This will be your first of many courses in pharmacology. This introductory course discusses the properties, mechanism of action, and effects of different classes of drugs such as cholinergic and anticholinergic agonists and antagonists. This course is not as content-heavy compared to your other courses, however the questions on the midterm and final exam tend to be conceptual and application based. The format of the midterm is a combination of multiple choice, matching, and short answer. The course format consists of one midterm, a participation mark, quiz, and a final exam. The participation mark involves answering a couple questions posted by Dr. Erclik throughout her lectures.

**Tips for Success:** These questions are good indicators of what you would expect to see on her midterm and final exam. Coming to lecture and taking notes are important for succeeding in this course.

# ANTICALNDAR

## Semester 2

### **PHM101 – Pharmacotherapy I: Foundations & General Medicine (PCT1)**

*Class Average: B*

This course, also known as “Gen Med”, will also be the first of many pharmacotherapy courses. The objective of this course is to prepare you for patient care practice by teaching you how to identify, resolve, and prevent drug therapy problems. Some of the topics covered in this course include common disease states encountered in pharmacy practise such as anemia, constipation, osteoporosis, peptic ulcer disease/GERD, osteoarthritis, and gout.. The assessment for this course involves attending weekly workshops/case-based discussions where you will be expected to prepare a pharmacotherapy workup and care plan for a given case. During the workshops, you are allowed to consult your notes and resources to answer questions posed by your workshop facilitator. You will also have one small group seminar in which you are not allowed to consult your notes. You will have to do the required readings in order to prepare. The one midterm and cumulative final consist of both short answer and multiple choice questions.

**Tips for Success:** Prepare the pharmacotherapy workups and care plans on a timely basis, take good notes during the workshops and lectures, and do the required readings.

### **PHM105 – Medication Therapy Management I (MTM1)**

*Class Average: B*

This course intends to simulate the pharmacy environment that you will encounter in your EPE placement in the summer. Course assessment consists of weekly labs that will require you to input prescriptions into Kroll (you can write on your resume that you know how to use Kroll!), check prescriptions, take verbal prescriptions, answer a drug information question using your skills from Pharmacy Informatics, and finally counsel a “patient” on how to use their medications properly.

Each week you will be assigned 13 different drugs

that could be tested during your lab. The weekly labs are organized according to dosage forms such as tablets, oral liquids, inhalers, topicals, and ear/eye drops. Assessment of this course consists of weekly lab marks, a mid-term, a milestone lab, and a final exam. To be successful in this course, it is important to attend the lectures and listen to the tips given by Jauhar and Andrea as well as do the required readings.

**Tips for Success:** Get to know some of your colleagues and form a group so that you can divide the drug list amongst yourselves each week.

### **PHM114 – Social and Behavioural Health**

*Class Average: B+*

This course is divided into two sections. The first half of this course is taught by Dr. Thompson who discusses the principles of clinical ethics and social determinants of health. In the second half of the course, Dr. Austin introduces the psychological aspect of patient care in pharmacy practise, drawing from psychological theories such as the Behaviouralism and Cognitivism. This course consists of a tutorial presentation (get in touch with your creative side!), a midterm, a written assignment, and a final exam.

**Tips for Success:** Practicing the past midterm and final exam questions posted by the professors is a good indicator of what you would likely see on the midterm and final exam. For the written assignment, it is important to follow the guidelines outlined for the paper and to clarify expectations with the TA. Again, the Health Sciences Writing Centre is a great resource to use.

### **PHM141 – Pharmaceutics**

*Class Average: B+*

This course covers topics, many of which you will already be familiar with from taking Pharmacokinetics the previous semester.. The course examines the properties of different dosage forms, and the factors affecting their production. The course consists of two take-home problem sets, two in-tutorial quizzes, a midterm, and a final exam.

# ANTICALEDAR

**Tips for Success:** Complete the problem sets, tutorial problems posted on BlackBoard, and review lecture note problems in order to adequately prepare for the problem sets, quizzes, midterm, and final exam.

## PHM143 – Pathobiology & Pathology

*Class Average: B*

This course focuses on different biological disorders such as diabetes, hepatic pathology, electrolyte & acid/base disorders, and cardiovascular disorders, just to name a few. Most of the lectures are given by clinicians who specialize in the disease/disorder. There is only one midterm and a final exam which are all multiple choice and non-cumulative.

**Tips For Success:** Attend lectures and take notes. The guest lecturers tend to give a lot of hints about questions you can expect on the exams.

## PHM140 – Molecular Pharmacology

*Class Average: C+*

This is definitely one of the more challenging courses that you will encounter in your first year. It is content heavy, as four different professors teach this course. The key to performing well is to keep on top of lecture material. Do your best to attend tutorials and have questions prepared for them. This course consists of two midterms that are non-cumulative, and a cumulative final exam.

**Tips for Success:** Practice, practice, and practice some more of Dr. Wells' previous midterms and final exams, making sure that your answers are specific and detailed. There are also past exams for the other professors' sessions. It is important not only to go through the material but to be able to apply your knowledge in order to answer the questions on the midterm and final exam.

# Second Year

Josephine Ho

## Semester I

### PHM201 – Pharmacotherapy 2: Dermatology and EENT

*Course Average: B+*

The format of this pharmacotherapy course is unlike the others. The beginning of the course is content-heavy with many hours of lecture, whereas the latter half of the course is mostly workshops. The content is very applicable to issues you will face in community pharmacies, with a focus on

dermatology and minor ailments. The tests and exams are all multiple choice questions, which are very craft-fully created (read them carefully!). The workshops are panel-style, with a group of students at the front, answering questions and posing questions about the case at hand. It seems intimidating at first, but it was a good way to learn how to approach an unknown diagnosis.

**It was interesting to:** view all the pictures in the lecture notes. (Not after lunch though!)

**It was challenging to:** get familiar with all the terminology used in the beginning of the course;

# ANTICALNDAR

there are a lot of words that you would have never heard before.

**Tip for Success:** Do the bonus assignment! Organize your notes wisely; there's a lot of material from the book and lectures that you want to categorize. Lastly, be confident in the workshops and take really good notes.

## **PHM202 – Pharmacotherapy 3: Endocrinology, Nephrology and Urology** *Course Average: B*

Pharmacotherapy 3, also known as “Endo,” was one of the most interesting and fun courses this semester (in my opinion). It was very similar to Gen Med; there were weekly lectures and workshops. The workshops run the same way: a group of students are selected to be on the panel and a group are selected to hand in their care plan. The workshops are not very stressful, and you get many opportunities to ask and answer questions. The content is presented by a variety of lecturers with expertise in the given topic, as well as Prof. Battistella and Prof. Halapy (both of whom are very passionate!). The midterm and final exams were fairly straightforward, but require you to be prepared and think carefully about the case. Overall, it was a great course covering very important topics!

**It was interesting to:** participate in the diabetes small group seminar (which is similar to the COPD small group seminar).

**It was challenging to:** learn all the drugs you need to be familiar with. Make drug charts and simplify them to key points when studying!

**Tip for Success:** Take really really good notes during the workshops!

## **PHM205 – Medication Therapy Management 2 (MTM2)** *Course Average: Pass/Fail*

MTM 2 is very similar to MTM 1, except there are no more written midterms or final exams. The weekly labs consist of a clinical skills portion (taking a verbal Rx, processing the verbal Rx, two prescription checks, and one written care plan) and

a patient care skills portion (counselling on the verbal prescription). Unlike MTM 1, there is no list of drugs to prepare for before the lab. However, the topic of the lab will be given to you in advance, so make sure to bring all your notes. Since you will be counselling on the drug that you get as your verbal prescription, you have some time to prepare before the patient skills portion of the lab. The counselling portion is more complicated than MTM 1 as you have to identify a drug therapy problem and solve it as well. Overall, it was a good learning experience and not too different from MTM 1.

**It was interesting to:** apply the knowledge learned in the pharmacotherapy courses to real cases.

**It was challenging to:** understand the marking scheme of the care plans, which tend to be quite specific.

**Tip for Success:** Stay calm when counselling and ask targeted questions to figure out what the DTP is. Don't jump to conclusions too quickly though!

## **PHM212 – Research Methods for Pharmacy** *Course Average: B+*

Some students found this course a bit dense and ‘dry’ but it is a really important course that teaches you how to tell good research from ‘not so good’ research. Prof. Taddio is a very experienced researcher who has many papers of her own. She gives you an overview of the different types of primary research and how to critically appraise the studies. You will also learn about clinical guidelines (which are very important in practice) and how they are compiled. There are in-class quizzes (based on a paper she gives you) and a midterm and final exam. The assessments are straightforward and directly from her lectures.

**It was interesting to:** learn about what people did in their papers.

**It was challenging to:** stay on top of all the lectures.

**Tip for Success:** Keep up to date with the course by studying for the quizzes! (They don't happen every week.)



# ANTICALEAR

## PHM241 – Topics in Pharmaceutical Quality and Clinical Laboratory Medicine

*Course Average: A-*

This course had two components: a weekly one-hour lecture, and bi-weekly lab. The midterm and final exams are very straightforward. The questions were directly from the lecture slides for the most part, and no material from the labs is tested. The labs consisted of a quiz (which you should study for!) and group work. It is super important to read the lab manual and be familiar with what to do in the lab as they can be quite long. You also want to have good results as they are marked! Overall it was a fun and interesting course.

**It was interesting to:** compound everything in the lab! We made lollipops, suppositories, lip balm, etc.

**It was challenging to:** have a really long day when you have both an MTM lab and a lab for this course in the same week.

**Tip for Success:** Read the lab manual! Also, you shouldn't fake data to what you think is correct; just report what you found in your experiment!

## PHM242 – Microbiology of Infectious Diseases

*Course Average: B+*

This course is a segway into the Pharmacotherapy of Infectious Diseases course next semester. It focusses on bugs and the diseases they can cause, with less emphasis on the drugs used for treatment. Dr. Crandall was always very enthusiastic about the material and shared interesting stories during his lectures. The course consists of three-hour lectures every week. There's a midterm and a final exam. The test questions are entirely from his slides and are well-balanced in terms of difficulty. It was a very enjoyable course! Warning: There are some graphic slides!

**It was interesting to:** learn from the professor. He is very passionate about the material and the learning process!

**It was challenging to:** remember some of the odd names of bugs and diseases.

**Tip to success:** Know the lecture slides well!

## Semester 2

### PHM203 – Pharmacotherapy 4: Infectious Diseases

*Course Average: B-*

Infectious Diseases (ID) is known as the 'hardest course of year 2,' however, it was not as bad as it seemed. The first two weeks were very heavy as the lectures focussed on antibiotics and their coverage. Although you are given all the information in a few hours, it takes many days and weeks to learn. Then the course becomes more disease-specific, and the lectures and workshops focus on specific disease states. There were a total of six workshops, which allow you to really get to know how to treat a specific infectious disease. The workshops are similar to the workshops in traditional pharmacotherapy courses, however, you are in groups (the same groups as in Cardio). Participation marks are based on group participation! To prepare for the workshops, each group is assigned two learning objectives which is then compiled in a master document of learning objectives for that topic. The readings were generally from DiPiro and practice guidelines. Besides the workshops, there were many other diseases that are only covered in the lectures. After a rocky beginning, the course gets more manageable and less intimidating.

**It was interesting to:** understand why and how antibiotics are used!

**It was challenging to:** understand the coverage - what drugs cover what bugs.

**Tip for Success:** Early repetition is key! Start early and learn the spectrum through repetition! Also never, ever, ever fall too behind. Try to plan out a full week to study before the midterm and final. Lastly, take really good notes during the workshops.

### PHM204 – Pharmacotherapy 5: Cardiovascular Diseases

*Course Average: B*

This course consisted of weekly lectures and bi-weekly workshops (alternating with ID) led by Prof. Kertland. The lectures are similar to other pharmacotherapy courses, covering pathophysiology,

# ANTICALNDAR

pharmacology (Dr. Erclik cameo!), and pharmacotherapy. The workshops were “unconventional,” as you are not given a case beforehand. You will be given a list of readings and learning objectives to work on the week before the case. In the workshop, there will be an individual quiz and a group quiz, along with a case for you to work on with the group. Prof. Kertland paces you throughout the workshop and encourages class discussion on the case. At the end of the workshop, you hand in the care plan that your group created. The midterm and final exams were challenging but it was definitely possible to do well. It is important to be very familiar with the different diseases, practice guidelines, and some key trials (she will tell you which ones). It may be easy to get confused because one class of drug is indicated in many disease states!

**It was interesting to:** take part in the workshops. Prof. Kertland is very knowledgeable and clear.

**It was challenging to:** try to keep up in the latter half of the course because the content is heavier and the same drugs are used for so many conditions.

**Tip for Success:** Try to keep on track every two weeks by completing the learning objectives yourself. Also, ask a lot of questions during the workshops!

## PHM206 – Medication Therapy Management 3 (MTM<sub>3</sub>)

*Course Average: Pass/Fail*

MTM 3 consisted of a one-hour lecture and one lab per week. There are no midterms or assignments. There were a total of eight labs (which were ten minutes each), on topics that you have covered in first semester or are covering in second semester. The labs are purely counselling interactions, with standardized patients played by a professional actor. The clinical instructor will not be part of the interaction, but will be observing and assessing. Jamie and Karen are very enthusiastic about the learning process and strive to be very fair. They are the ones to determine your grade of Pass/Fail/Honours, based on the checklist and comments from the clinical instructors. Each week they give

specific tips on how to succeed in the lab and highlight what resources are important. It is intimidating at first, especially since you do not know what drug (if any) you would be counselling on before the lab, but it quickly becomes less stressful and more enjoyable. The final exam is a lab with two counselling interactions and two documentations. There is also a three-hour motivational interviewing workshop in the first few weeks of the course.

**It was interesting to:** learn from Jamie and Karen, who are dedicated to help us learn and improve as each lab passed.

**It was challenging to:** stay calm and think through the problem before making a decision during the counselling interactions.

**Tip for Success:** Listen to the feedback provided by the standardized patients regarding communication, it was super helpful!

## PHM213 – Health Economics and Pharmacoeconomics

*Course Average: A-*

This economics course consisted of two hours of lecture per week and a few optional tutorials near the end of the semester. The assessments consisted of a midterm, two assignments, and a final exam. The first half of the course focussed on a few basic principles of economics, which some students found to be hard to follow and confusing. The lecture slides are accompanied by notes prepared by the specific professor presenting the material (three in total). The latter third of the course was specific to health economics, where you explore how decisions for funding health initiatives are made based on economic principles. This material made up the majority of the final exam and was very interesting and well presented.

**It was interesting to:** be able to apply basic economic principles to almost everything and making things “efficient!”

**It was challenging to:** understand concepts from the beginning of the course.

**Tip for Success:** Go to the lectures and go to the TA office hours. They’re very nice!

# ANTICALENDAR

## PHM215 – Management: Skills, Communication and Collaboration

*Course Average: B+*

This course consisted of a two hour lecture each week,. The assessments included a midterm, a written assignment, and a final exam. The material was very different from all our other courses, focussing more on skills of effective managers, how to manage your own life, and encouraging us to find what our own unique selling point is (much like a self-help book). It was a fresh breath from the other dense courses of this semester. The lectures are presented by a variety of guest lecturers (who are successful managers and leaders) and Prof. John Farrell, who showed great interest in the topic. It was also a lead-in to the Business Plan Competition, which students prepare for in the summer. The assessments were very straightforward from the lectures (slides and readings) and the written assignment was to write part of a business plan.

**It was interesting to:** obtain different perspectives (and advice) from successful individuals.

**It was challenging to:** complete the written assignment (for some students).

**Tip for Success:** Go to the lectures because you'll definitely remember the things they tell you! The material isn't dense at all and is very interesting.

## PHM230 – Physical Assessment and Injection Techniques

*Course Average: B+*

This course, fondly referred as "nursing" by many students, was taught by Prof. Degan, a Nurse Practitioner. During the weekly one-hour lectures, she went through each body system, covering basic anatomy, subjective and objective observations, and an assessment of the condition. Going to the lectures was very important as there is a lot of verbal information that was tested. To supplement the lectures, there was a one-hour lab in the Nursing Building to practice the assessment strategies for each week's topic. The labs were informative and did not cause stress. The TAs are nurses who demonstrate and teach you how to do the assessments. The midterm and final exams were

entirely multiple choice questions. Most of the questions were drawn from lecture material, with some questions from content emphasized in the labs.

**It was interesting to:** learn how to manually someone's measure blood pressure!

**It was challenging to:** rush from the MTM lab to the nursing lab (for some people).

**Tip for Success:** Be sure to attend lectures (or get really good notes) and pay attention to 'hints' from the labs.

## PHM240 – The Science of Pharmacotherapy (Online)

*Course Average: B*

This course was unlike other courses. There were a total of fifty online modules which contained questions (some multiple choice questions, some short answer) on a variety of topics. The goal is to learn from answering these questions; first from your own attempt at the question, then from reading the answer that Dr. Uetretch provides on Blackboard. Fortunately, you just have to know the answer that Dr. Uetretch provides, but the rationale for setting the course up this way is to encourage active learning. There were no direct penalties for wrong answers or not doing the modules. The course is entirely online, except for optional (almost weekly) tutorials where students can ask questions from the online modules. The content is quite interesting and some of it linked to what we learn in other courses. There are two midterms and one final exam. The questions are all short answer, so make sure you answer what is being asked in a concise but thorough manner. Overall, The Science of Pharmacotherapy is a fun course, but beware of falling behind (or forgetting about this course... oops!).

**It was interesting to:** attend the tutorials! Dr. Uetretch gives his take on the topics in the modules, some of which he is very passionate about!

**It was challenging to:** keep up and not fall off the train.

**Tip for Success:** Plan out how many modules you will do per week. The first midterm comes sooner than you think.

# ANTICALNDAR

## Third Year

Linda Yang

*This anti-calendar was made possible with the help of these contributors: Shunzhi Matthew Chang, Edmond Chiu, Krisban Kanesalingam, Richard Li, Chloe Li, Brenda Li, Jonathan Mak, Sarah Ngov, Anam Quraishi, Ran Shu and Guibong Teng*

### Fall Semester

#### **PHM310 – Health Systems II**

*Course Average: B*

This course was fairly different from Health Systems I. It addressed the implicit and explicit beliefs that healthcare professionals may have about themselves, patients, and other healthcare professionals. The professors were flexible and adjusted the curriculum accordingly. They made sure that students gave ample thought to the final assignment by incorporating multiple drafts and mini-assignments before it was due.

#### **PHM301 – Pharmacotherapy 6: Hematology, Oncology and Immunotherapies**

*Course Average: B-*

Like the previous pharmacotherapy courses, this class has a packed course load. Students will learn not only about chemotherapies, but also about palliative care, hematology, personalized medicine, rheumatoid arthritis, IBD, and pain management. To do well in this course, be sure to keep up with the readings and to take detailed notes during the workshops. Making continual notes on the readings before the quizzes will help make the final and midterm easier to prepare for, and it will also help you answer questions during the workshops.

#### **PHM302 – Pharmacotherapy 7: Neuropsychiatry**

*Course Average: B*

The neuropsychiatry course was well-organized and covered a new topic every week: schizophrenia, depression, bipolar, seizures, benzodiazepines, opioids, migraines, and Alzheimer's. The multiple choice scratch card quizzes that were given out during the six workshops were a good motivator to study regularly during the school year. This strategy made studying for midterms and exams easier to handle. However, the final written essay was admittedly more difficult. The professors for this course were fantastic, and they brought not only a plethora of knowledge but also real experiences to the classes and to the workshops.

#### **PHM305 – Medication Therapy Management 4 (MTM4)**

*Course Average: Pass/Fail*

Unlike the previous MTM courses, MTM4 focussed more on expanded scope activities such as knowing how to renew and adapt prescriptions, perform Medschecks, do Medication Reconciliation, and complete BPMHs. While this MTM put less focus on therapeutics, students are still expected to recognize DTPs. Thus, it is recommended to do readings, make preparatory notes, and practice with fellow classmates beforehand to successfully complete MTM4.

#### **PHM340 – Introductory Toxicology**

*Course Average: B+*

The introductory toxicology course requires that students be able to memorize the pathways for teratogenesis, neurodegeneration, and various other toxicological processes. However, students will not only be required to memorize these pathways, but also to apply them. During the midterm and final



# ANTICALEAR

examinations, there will be one to two questions with short answer portions. As such, being able to recall and apply the correct pathway to the correct situation is critical to do well in this course. Be sure to study from past exams and try to solve them before going into the midterm and final exams. However, do not try to predict the midterm or final questions because while the questions may look similar, they have been known to vary from year to year.

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## **PHM325 – Aboriginal Issues in Health & Healing**

*Course Average: A-*

This course covers topics that are not emphasized in other pharmacy courses. It does not demand a lot of time, and there is no midterm or final exam. Instead, there are assignments and reflections that are to be completed based on class discussions. The class atmosphere is very relaxing and allows students to feel a sense of community and belonging. The class allows students to slow down in their busy, pharmacy student lives and reflect on the world around us, especially on aboriginal issues. While the details from class are not exactly testable, major ideas will guide your thinking when completing assignments. Students are also invited to participate in sweat lodges and various other events throughout the year.

## **PHM383 – Antimicrobial Stewardship**

*Course Average: B+*

This course is taught by the same lovely professor who taught intra-abdominal infections in second year: Professor So. She's very passionate about antimicrobial stewardship! In this class, you will learn about how antimicrobial stewardship practices are set up in hospitals, and you will get the chance to develop policies based on a fictitious hospital. Some topics that were covered include antimicrobial steward programs (ASP), UTI, CAP, SSTIs, pediatric considerations, C. diff infections, ASP

development/metrics/implementation, quality improvement, febrile neutropenia, venous-catheter associated blood infections, VAP, intra-abdominal infections, and research in antimicrobial stewardship. During class, Professor So uses an interactive module that challenges students to ask what information they need in order to work up a patient case. Students will also be required to complete a group project. While the project may seem daunting because it is judged by a panel of working professionals in ASP, the panel was largely impressed by the class. The midterm and final exams consisted mainly of short answer questions with few MCQ.

## **PHM323 – Molecular Mechanism of Drug Action**

*Course Average: A-*

Don't be intimidated by the course name! This is actually the "prequel" to MolPharm in first year. It touches on more basic concepts of receptor-ligand interactions and DNA structure. This course is easy as long as you try to understand the main concepts. Like MolPharm, you are not required to understand Dr. Well's section perfectly due to the bonus marks. However, if you really hated the mathematical derivation of equations in MolPharm during first year, then this course may not be for you. If you were okay with deriving most of the equations, then you will be fine. Overall the course load is lighter than most pharmacy courses.

## **PHM321 – Selected Topics in the Pharmaceutical Industry**

*Course Average: B*

Industry class provides students with an overview of topics you will need to know to work in an industry setting. The course goes over regulations for drugs and the different roles that many pharmacists play in industry. The course itself is theoretical, but it is relevant if you do an industry rotation in 4th year. During industry rotations, you might not apply the knowledge directly. However, this course helps you understand the reasoning behind the roles that you might play and the tasks that you may be required to

# ANTICALNDAR

carry out during rotations. This course may not have a lot to study, but some of the questions can be detailed and throw you off guard. This course is highly recommended if you are curious about the pharmaceutical industry.

## Spring Semester:

### PHM330 – Transition to APPE

*Course Average: Pass/Fail*

This is the only mandatory course for all students this semester. This used to be a condensed one-week course at the end of our last didactic semester, so in the past, students wouldn't get a one week break between final exams and the start of APPEs. This year, the course was spread out more evenly during the entire semester. While most of the classes didn't have a lot of content to memorize, the lab values lecture was relatively dense and students should attend and take notes to prepare for the final exam. The entire course consists of almost a different guest lecturer every week and covers a wide range of topic areas – from critical appraisals to learning about your individual learning style.

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### PHM387 – Global Health

*Course Average: A-*

The Global Health course offers a unique perspective of pharmacy that complements the therapeutic education that we have received in the past few years. Applying materials such as the WHO Essential Medicines List and national guidelines to cases will help students adapt therapeutic knowledge to different resources. Dr. Doret Cheng is very helpful in answering questions and helping students excel in this class. This course is highly recommended to anyone who wishes to expand his/her horizon in the field of pharmacy. The assessments include a midterm, a final paper, 5 one-page reflections, and a presentation. There is no final exam.

### PHM385 – Diabetes Care

*Course Average: B*

This course consisted of a 40% MCQ midterm and 60% final with MCQ and case-based questions. This course is useful for anyone who is considering becoming a CDE (Certified Diabetes Educator). Considering the increasing prevalence of diabetes in the patients we will encounter in practice, this course is useful for any future pharmacist as well. Students will learn about proper nutrition and exercise for diabetics, how to count carbs, and special situations that a diabetic patient may encounter such as pregnancy, travelling, complications, and diabetes in children. This course is highly recommended, especially for students who wish to work in a community setting.

### PHM353 – Pharmacotherapy in Critical Care

*Course Average: Unknown (This may be due to a large portion of the class being PharmD for Pharmacists students.)*

Don't let the "critical" in the name scare you – this is actually a very interesting and rewarding course that is co-coordinated by the class of 1T8's professor of the year, Norman Dewhurst. The material may be dense and challenging, but the lectures are all delivered by clinical pharmacists who are experts in their respective fields. You can expect to become quite familiar with commonly encountered ICU syndromes such as sepsis, shock, acid-base disorders, traumatic brain injuries, as well as supportive measures such as postsurgical care, total parenteral nutrition, and renal dialysis. Students will also learn how to manage pain, agitation, and delirium. The course even featured three allied health guest lecturers who came to discuss principles of mechanical ventilation, invasive monitoring devices, and ethical issues in critical care. The course was evaluated based on three quizzes on Blackboard (5% total), two case discussions prior to the midterm and final (5% total), a critical appraisal assignment (10%), a midterm (35%), and a final exam (45%). Students found that some of the questions on the quizzes were unnecessarily difficult and required knowledge of topics that were not discussed in the preparatory

# ANTICALEAR

readings, but hopefully this will be changed in future years. The case discussions served as useful review sessions and allowed students to see many of the previously discussed topics come together in a single patient case. If students closely follow the instructions for the Critical Appraisal assignment, it shouldn't be too difficult to do well on. The coordinators will also make every effort to ensure that no one performs poorly. Overall, the workload of the course was not heavy during the semester as there are no care plans or documentation. However, do not leave studying to the last minute because there is a lot of material. Overall, this course was a unique opportunity to gain exposure to a branch of medicine in which pharmacists can make a tremendous difference for patient care.

## **PHM351 – Pharmacotherapy in Institutional Care**

*Course Average: B*

This course is arguably the most useful of the three possible options in this course selection bracket for future hospital pharmacists. Some topics that were covered include VTE, pre/peri/post op, ACS, drug overdose, critical care basics/shock, fluids/electrolytes, acid/base disorders, nutrition, in-hospital management of diabetes, alcoholic liver disease, acute GI bleeding, hypertensive emergencies and status epilepticus. In this course, there are weekly online quizzes worth 0.5% each. While they are worth very little, the quizzes were critical in helping students do the readings beforehand and prepare early for the midterm and final exams. The course also required students to complete at least four out of five chart documentations/care plans. As many of the midterm and final questions were related to these care plan topics, completing them and having them on hand was very helpful when studying for the final exams. In addition to the quizzes and chart documentations, the course also had two group seminars during the semester. During these group seminars, students were divided into smaller groups and worked together to complete chart documentations for a patient. These sessions were a great way to consolidate knowledge from the

readings as well as to understand what is actually done in practice. However, be sure to do both the optional and the required readings before the seminars. Some of the studies and trials that came from the optional readings were very helpful when answering questions during the seminar. Despite the heavier workload, this course is highly recommended due to the breadth and usefulness of topic areas that were covered.

## **PHM350 – Pharmacotherapy in Ambulatory Care**

*Course Average: B+*

As the course name implies, this course covers conditions managed at the ambulatory/outpatient level. Topics that were covered include anticoagulation, asthma, CHF, COPD, diabetes, hypertension, mental health (antidepressant drug interactions, adverse reactions to psychotropic drugs), pain, and stable angina. There were also special guest lectures about topics such as occupational therapy, point-of-care testing, and vaccination. The professor is very straight-forward with the content he provides, but that can sometimes make it difficult to stay engaged for a morning class. The format of this course included lectures, documentation submissions, a midterm, and a final exam. Broadly speaking, this course serves as a good review of many topics you have learned already. There are no readings and each week there is a documentation assignment, where 5/8 count toward your final grade. The documentations are based on a case presented in class, alongside a discussion of the DTPs. In addition, the midterm and exam are very straight-forward. Most students finish the multiple-choice questions before the 30-minute mark. The one or two short answer questions were generally about a monitoring plan, and were either similar to the chart in care plans or required explaining a topic. The workload of this course is probably the lowest among the other choices in this elective category. That is not to say you can't get anything out of this course, as it was good review before going into APPEs!

# ANTICALNDAR

## **PHM352 – Pharmacotherapy in Geriatrics**

*Course Average: B+*

While not as popular as Pediatrics or Women's Health, Pharmacotherapy in Older Adults is definitely one of the more applicable courses to take, especially given Canada's aging population. You will learn about important topics that are not covered in other classes, such as Parkinson's disease, delirium, de-prescribing, and end of life care. In addition, it will be a helpful review of other common disease states that you have learned about in previous PCT courses (i.e. diabetes, hypertension, endocrine disorders, and insomnia), but from the perspective of an older adult. In general, lectures featured a case (posted by the professor in advance) that will help illustrate how to manage the disease state in an actual patient. There are also two integrated case discussions that take place prior to the midterm and final exam. Last year, the mark distribution consisted of a 40% midterm, 50% final, and 10% polypharmacy assignment. The assignment was rather straightforward and easy to do well in, but the marking scheme on exams was focused on very specific details. Remember to list endpoints and goals of therapy that can actually be measured. Overall, the workload for the course wasn't too heavy because many of the pre-midterm topics will be review of past PCT courses, but remember to study hard for the exams!

## **PHM355 – Pharmacotherapy in Women's Health**

*Course Average: B+*

The depth of knowledge presented in this course makes it much easier for students to understand why certain recommendations are made in a variety of practical situations. Topics that were covered included the female reproductive cycle, contraception strategies, dysmenorrhea, PMS, menopause, peri-menopause, endometriosis, transgender health (sex transitions), polycystic ovarian syndrome, medical abortion, female sexual dysfunction, female infertility, and pregnancy planning. This course is taught by three professors. Tom Brown and Marko Tomas help teach the first

half of the course, while Lisa McCarthy teaches the rest. Note that Professor Tom Brown received the Professor of the Year award from rT8s this past year. The format of this course included lectures, an in-class assignment, a midterm, and an exam. For the assignment, groups of 4 were formed by student choice. Two students from each group of 4 were assigned different readings. Then, the students were given an in-class quiz about the readings, followed by a case work-up, and finally an in-class culminating quiz after discussion with all the group members. Overall, the lectures were fun and the lecture content is very applicable for future practice.

## **PHM354 – Pharmacotherapy in Pediatrics**

*Class Average: B+*

This course had many guest lecturers and the topics were very diverse. The midterm and final exams consisted of straightforward multiple-choice questions, and there was a major assignment based on pediatric pharmacokinetic calculations. Content from this course is very applicable to practice, and some concepts overlap with the Minor Ailments course. The two professors who taught this course were very engaging and often asked students about what they would like to learn. They also spent the time to get to know each student, and even offered onsite visits and tours around Sick Kids.

## **PHM361 – Biologics**

*Course Average: A*

The first part of the course covers background information, and the second half consists completely of student presentations. Attendance to these student lectures was not mandatory. The final exam is cumulative, and a large proportion of the question content came from the first half of the course. The exam consisted entirely of written responses, which were limited to about 20 sentences. The exam questions were not particularly difficult, but the lectures can be a little difficult to follow at times. The presentation marks tend to be quite high as well.



# ANTICALEDAR

## PHM360 – Personalized Medicine

*Course Average: A-*

As more and more patients get genomic testing done, and as genetic testing becomes increasingly cheaper, patients will soon be bringing in their genetic tests to their future pharmacist to interpret. This course was a great way to help students prepare for questions about genetic testing that patients may have. Lecture topics included inter-patient variability, drug targets, as well as how various methods of genetic testing work. The second half of the course consisted of mainly student presentations and covered a variety of drugs such as statins, antiplatelets, antidepressants, PPIs, warfarin, antiviral medications, etc. Students were taught how to do their own research on how receptor or drug target variants affected the dosing or the selection of medications. Students were also given the privilege of meeting various pharmacists who have already incorporated personalized medicine as a new expanded scope service in their practice.

## PHM362 – Bioequivalence

*Course Average: B+*

Dr. Dubins is a great lecturer who can explain difficult concepts clearly and make them easy to understand. He teaches at a reasonable pace with a lot of examples to help consolidate concepts. However, the exams may be tricky because they require the student to understand the material well and be able to apply them. There were very few MCQ on the midterm and final exams. Most of the policy or history that was taught in the course is not testable. Do not fret if you don't do well on the exams! Many students found that the biweekly assignments/problem sets tended to boost up the marks in comparison to the exams. These problem sets can be done together and are not very difficult. In this course, students will also do basic programming with Excel, but Dr. Dubins will provide the spreadsheets and codes so students are only required to follow the instructions and interpret the results. During lectures, students will be taught pharmacokinetics, regulatory rules (FDA, Health Canada, EMA), and clinical trial design. He

also reviews statistics and data modeling. If you're interested in doing research or going into industry, this may be the course for you.

## PHM381 - Medical Imaging

*Course Average: B+*

The course material is very well organized by Dr. Reilly. The material itself is adequate for the exams. The "read with expert" sessions are very interactive and enjoyable. Students felt like a clinical detective guided by experienced radiologists. Overall, the course offers insight into a unique aspect of medicine which is not available elsewhere to pharmacy students.

## PHM370 – Community Pharmacy Management

*Class Average: B+*

This is the ideal business course for those who are thinking of opening a pharmacy in the future. However, the concepts that you learn in this course are fundamental for any work setting, because each organization must manage money, marketing, and human resources. Understanding these concepts puts you in a better place to contribute to your workplace, even in a hospital. In this course, the fundamentals of business management are taught by Jauher. Many of the classes are also taught by guest lecturers such as Dean Miller (Whole Health Pharmacy Partners Founder) and Angelo Dias (community pharmacy owner). Due to the wide range of interests, Jauher has tried his best to find guest lecturers that come from a wide range of stores, such as banners, independents, and Shoppers Drug Mart. The format of this course includes lectures, a business plan in two parts, a midterm, and a final exam. The midterm was composed of both MCQ and short answers, while the final exam was all MCQ. In the assignment, your goal is to open a pharmacy from scratch using a vacant commercial space. Be sure to look at examples from previous years and refer to your notes from each class to help you write this business plan.

# ANTICALNDAR

## **PHM371 – Institutional Pharmacy Management**

*Course Average: A-*

This course required mostly memorization work as there were many lists that were taught in class. Overall, this was a fairly straightforward course. There were no assignments, and only one midterm and one final exam. Be sure to make notes for these lists beforehand so that the final exam is easier to study for. Remember, acronyms are your friend!

## **PHM322 – Patient/Medication Safety**

*Course Average: A-*

The professor for this course, Certina Ho, is one of the most amazing professors at the Faculty. She is always there for her students, and always willing to help. She has done skype calls across the world at 11pm to give feedback about student presentations. She brings colored printouts to class, and even hand marks all of the final MSSA assignments. In this course, students will learn about preventable adverse drug events with a focus on drug-drug interactions in the first class. Students will also learn about high alert medications, hierarchy of effectiveness, how to perform disclosure, reporting of a medication incident, root cause analyses, MSSA, MIA, FMEA, and much more. In addition, students will receive certifications from ISMP Canada for completing workshops such as the Multi-Incident Analysis Workshop. Generally, pharmacists pay for these workshops, but in the Patient and Medication Safety course, these workshops are condensed and offered for free. This course is highly recommended if you're interested in learning how to transform your pharmacy, whether it is in the community or at a hospital, into a safer place for your patients.

## **PHM388 – Minor Ailments**

*Course Average: B*

The minor ailments course was one of the most useful courses offered this term. Students will learn about how to identify patients who are self-care candidates as well as various OTC treatments for

topics such as fever, headache, pain, sports injuries, colic, diarrhea, teething, xerostomia, halitosis, aphthous ulcers, weight management, vaginitis, dysmenorrhea, PMS, acne, the common cold, and much more. Professor Nardine makes sure that students are constantly engaged in class. She also brings in various OTC products for students to try and to experience first-hand before recommending them in practice to patients. After taking this course, many students believe that Minor Ailments should be a mandatory course for all students in third year.

## **PHM384 – Teaching and Learning**

*Course Average: B+*

This limited enrolment course seemed to be a popular option for students who consider themselves as future mentors. The course includes practical experiences of learning how to structure and present feedback towards MTM-1 and MTM-3 students as well as written reflections of every concept application. The course assessment is reflective in nature. There are a total of 3 written reflections, one written essay (in place of a midterm), as well as a group presentation (though this could change in the future).

## **PHM386 – Mental Health & Addiction**

*Course Average: B+*

The mental health and addiction course was very insightful and focused on issues in contemporary practice and the real world. This course is highly recommended to everyone due to the increasing prevalence of mental health issues and the growing need for pharmacists to be involved in the care of patients with mental illness or substance use disorders. Maria Zhang is an excellent professor and gives the majority of lectures, with occasional guest lecturers. The midterm and final exams were not difficult and the workload was not heavy.