

Pharm 3011 2019 Syllabus

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Thursday September 5- November 28, 2019: Dentistry 3156- 1:05-3:25h Note: Class will be held on TUESDAY Nov 19 from 1:05-3:25 in Burbidge Room 318 and will be held THURSDAY Nov 28 from 9:00 to 12:00 in Burbidge Room 318			
Date	Topic and Pre-Reading	Instructor	Assignments/Other
Sep 5	One Way Analysis of Variance Course , Evidence-Based Case Report, Case-based Journal Club Overview <i>Pre-reading: Syllabus, EBCR and JC related documents</i>	Wang Burgess	
Sep 12	Two Way Analysis of Variance Randomized Controlled Trials, Odds Ratios <i>Pre-reading: Users' Guide Ch. 7 and 12.2</i>	Wang Hallett	Stats Assignment 1 Given
Sep 19	Multiple Regression: Part 1 Library Tips	Wang Helwig	EBCR groups and case skeletons posted
Sep 26	Multiple Regression: Part 2 Journal Club 1: RCT (rooms 1-6)	Wang Burgess	Stats Assignment 1 Due
Oct 3	Meta-analysis Systematic Reviews/Meta-analysis: Part 1 <i>Pre-reading: Users' Guide Ch 22, 23, 24</i>	Wang Burgess	Stats Assignment 2 Given
Oct 10	Systematic Reviews/Meta-analysis: Part 2 Evidence-Based Clinical Practice: Tools of the Trade <i>Pre-reading: Users' Guide Ch 22, 23, 24; Users' Guide Ch 2, 10, 12.1; Evid Based Med. 2016 Aug;21(4):125-7; Evid Based Med. 2016 Aug;21(4):123-5</i>	Burgess Burgess	EBCR Draft Case Due
Oct 17	Equivalence, Non-Inferiority and Superiority Testing Non-Inferiority Trials <i>Pre-readings: N Engl J Med 2009; 361(12):1139-51, Users' Guide Ch 8</i>	Wang Burgess	Stats Assignment 2 Due CAS Assignment 1 Given
Oct 24	Logistic Regression Journal Club 2: MA/SR (rooms 1-6)	Wang Burgess	Stats Assignment 3 Given Return EBCR case draft to students
Oct 31	Survival Analysis: Part 1 Survival Analysis: Part 2	Wang Wang	CAS Assignment 1 Due
Nov 7	Handling Missing Data/Bootstrapping Journal Club 3: Non-inferiority (rooms 1-6)	Wang Burgess	Stats Assignment 3 Due Stats Assignment 4 Given
Nov 14	Reading week – no class		
Nov 19 <small>(Burbidge Room 318)</small>	Propensity Scores Diagnostic Testing <i>Pre-readings: Making Sense of Critical Appraisal Ch.3, http://www.bandolier.org.uk/band64/b64-7.html, Users' Guide Ch 18</i>	Wang Burgess	Stats Assignment 4 Due
Nov 28	Exam Preparation – Statistics & CAS (25 min) CAS Jeopardy (2 hr)	Wang/Burgess Burgess	
Dec	Exam (Date TBD)	Course faculty	

Course Content:

This course constitutes the third of five terms in the Critical Appraisal Series (CAS). It endeavors to extend the concepts and skills developed in the first and second term of this series.

Course Objectives:

1. To develop patient-specific clinical problem-solving skills.
2. To develop critical appraisal and problem-solving skills applicable to the clinical and drug evaluation activities of a pharmacist.
3. To develop skills and knowledge of the concepts and process of evidence-based pharmacy practice.
4. To develop skills to optimize the use of the pharmacy and medical literature.
5. To develop knowledge of statistical concepts, terminology and methods with the intention of improving critical appraisal skills and basic understanding of biostatistics.
6. To improve knowledge and understanding of the role statistics play in clinical trials.
7. To develop skills complementary to and supportive of the Problem-Based Learning curriculum.
8. To develop skills for professional writing.
9. To develop efficient techniques for reviewing pharmacy/medical literature.

Methods:

1. Lectures will provide the basis for being introduced to the core content of the course.
2. Application and practice of critical appraisal skills will derive from preparation for classes, pop quizzes, term assignment, journal clubs, and the final exam.
3. Searching, writing, and clinical abilities and knowledge will be developed by the evidence-based case report term paper.

The following **educational outcomes** (required AFPC educational outcomes) are the focus of the **overall course**:

Scholar

As **scholars**, Pharmacy graduates take responsibility for excellence by applying medication therapy expertise, learning continuously, creating new knowledge and disseminating knowledge when teaching others

SC1: Apply medication therapy expertise to optimize pharmacy care, pharmacy services and health care delivery.

SC2: Integrate best available evidence into pharmacy practice.

SC3: Contribute to the creation of knowledge or practices in the field of pharmacy.

SC4: Teach other pharmacy team members, the public and other health care professionals including students.

In addition, the **lectures, exercises, pre-readings, assignments, and examinations** will also address the **Care Provider, Communicator, and Professional educational outcomes** (required AFPC educational outcomes).

Care Provider

As **Care Providers** pharmacy graduates provide patient-centred pharmacy care by using their knowledge, skills and professional judgement to facilitate management of a patient's medication and overall health needs across the care continuum. Care Provider is the core of the discipline of pharmacy.

CP1: Practise within the pharmacist scope of practice and expertise.

CP2: Provide patient-centred care.

CP3: Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety.

Communicator

As **Communicators**, pharmacy graduates communicate effectively in lay and professional language, using a variety of strategies that take into account the situation, intended outcomes of the communication and diverse audiences

CM1: Communicate in a responsible and responsive manner that encourages trust and confidence.

CM2: Communicate in a manner that supports a team approach to health promotion and health care.

Professional

As **Professionals**, pharmacy graduates take responsibility and accountability for delivering pharmacy care to patients, communities and society through ethical practice and the high standards of behaviour that are expected of self-regulated professionals. The Professional role is the overarching ethos of the discipline of pharmacy

PR1: Committed to apply best practices and adhere to high ethical standards in the delivery of pharmacy care.

PR2: Able to recognize and respond to societal expectations of regulated health care professionals.

PR3: Committed to self-awareness in the management of personal and professional well being.

As a Professional in this course, you will be accepting responsibility for the course work submitted and consider it a representation of your professional image. Written submissions will also be expected to maintain professionalism using the criteria in the **Communicator** outcome above

Office Hours:

Dr. Sarah Burgess

Contact for an appointment: sarah.burgess@dal.ca

Dr. Huaichun Wang

12:30-13:00 Seminar Room 6, Thursdays between September 12th - November 28th, 2019.

Contact huaichun.wang@dal.ca for an alternative appointment, if needed.

E-mail Contact & Etiquette:

Students are encouraged to use e-mail to contact the professors with the following provisos:

- Use e-mail when the issue is simple (e.g. booking an appointment; highlighting an issue you would like addressed in the next class). Avoid using e-mail to address complex issues. In such cases, speak to the professor directly;
- Be professional;
- Do not expect rapid responses, though at times this may be what you get.

On occasion the professor may **broadcast** to all students and relevant faculty their response to a student

e-mail. For example, a student may ask a particularly incisive question or may point out something unclear or erroneous that all students would benefit from knowing.

Phar 3011 Particulars:

Classes in the fall term will be lecture based or a journal club. Most classes are biostatistics followed by critical appraisal. When appropriate, the two lectures will be linked in terms of content.

Course content will be posted as follows:

All but Prof Huaichun Wang: PharmX

Prof. Huaichun Wang:

<https://mathstat.dal.ca/~hcwang/Phar3011X.html>

Required Textbooks:

1. Guyatt G, Rennie D, Meade MO, Cook DJ. Users' guide to the medical literature. A Manual for evidence-based clinical practice 3rd edition, The McGraw-Hill Companies, 2015.
 - Available online through Dal Libraries: : <https://dal.ca.libguides.com/jamaevidence>

HIGHLY Recommended Resource:

1. Ajetunmobi O. Making sense of critical appraisal. New York: Oxford University Press, 2002.
 - Available online through Dal Libraries

Other Useful References:

1. Deveau R, Velleman P, Bock D. STATS: Data and Models, 2nd edition, New York: Pearson Education, 2008.
2. Greenhalgh T. How to read a paper. The basics of evidence based medicine. 3rd edition, Massachusetts: Blackwell Publishing Group, 2006.
3. Straus SE, Richardson WS, Glasziou P, Haynes RB, editors. Evidence-based medicine: how to practice and teach EBM, 3rd edition. Edinburgh: Elsevier, 2005.
4. Chiquette E, Posey LM, editors. Evidence-based pharmacotherapy. Washington: American Pharmacists' Association, 2007.

Evaluation:

Pop quizzes	5%
Statistics assignments (5)	20%
CAS Assignment	5%
Journal clubs	15%
Term paper - case & clinical question	10%
Fall term comprehensive exam (CAS and statistics)	45%

Five stats assignments and one CAS assignment will be completed in the fall term. Assignments must be submitted **at the start of class** on the due date. A 25% reduction in grade will be applied to all late assignments up to 24 hours from the due date, after which the assignment will not be marked and a grade of zero will be applied.

Mandatory pre-readings will be assessed by brief quizzes. There is no opportunity to make up for a missed quiz. If you miss a quiz, for **any** reason, a grade of zero will be applied.

In addition to earning a cumulative course grade of 65%, the **following minimums** must be met by each student to achieve a passing grade in this course: 65% on each section of the exam (Stats: 65%; Critical appraisal: 65%).

Students failing to meet these minimum requirements will receive a grade of Incomplete (INC) and be given a one-time “in course” opportunity to improve their assessment performance (e.g., re-write exam). The re-write is completed for the exam section that did not achieve the minimum grade (e.g.: if a grade less than 65% was obtained on the statistics portion of the exam, only the statistics portion requires a re-write). In the event a grade higher than 65% is achieved on the re-write, the pass mark (eg. 65%) will be provided for that section of the exam.

Students will earn a failing grade in Phar 3011 if:

1. The minimum mark (%) on make-up work is not achieved.
2. If the cumulative course grade is less than 65%.

Eligibility for supplemental assessment will be determined at the end of the academic year as described in the College of Pharmacy Regulations. Supplemental Assessments will be scheduled at the discretion of the course coordinator.

As is to be expected in a co-operative learning environment, The College’s grading uses a pass/fail system. However, to ensure that students remain eligible for scholarships etc., GPAs are calculated internally using the Dalhousie University process for calculating GPA. Dalhousie University has a university-wide grading scheme which will be used in the College of Pharmacy.

Access to Examinations:

Upon request in writing or via email students can request an appointment with the Course Coordinator to review their examination. The purpose of such a review will be to identify areas of weakness. No mark adjustments will be made unless there has been a coding error in the multiple choice answer key or a mark calculation error.

About Intellectual Honesty and what it means for you

At Dalhousie University, we are guided by the values of academic integrity: honesty, fairness, responsibility and respect. As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

WHAT DOES ACADEMIC INTEGRITY MEAN?

At university we advance knowledge by building on the work of other people. Academic integrity means that we are honest and accurate in creating and communicating all academic products. Acknowledgement of other people's work must be done in a way that does not leave the reader in any doubt as to whose work it is. Academic integrity means trustworthy conduct such as not cheating on examinations and not misrepresenting information. It is the student's responsibility to seek assistance to ensure that these standards are met.

HOW CAN YOU ACHIEVE ACADEMIC INTEGRITY?

We must all work together to prevent academic dishonesty because it is unfair to honest students. The following are some ways that you can achieve academic integrity; some may not be applicable in all circumstances.

- make sure you understand Dalhousie's policies on academic integrity (see http://www.dal.ca/dept/university_secretariat/academic-integrity/academic-policies.html)
- do not cheat in examinations or write an exam or test for someone else
- do not falsify data or lab results

Be sure not to plagiarize, intentionally or unintentionally, for example...

- clearly indicate the sources used in your written or oral work. This includes computer codes/ programs, artistic or architectural works, scientific projects, performances, web page designs, graphical representations, diagrams, videos, and images
- do not use the work of another from the Internet or any other source and submit it as your own
- when you use the ideas of other people (paraphrasing), make sure to acknowledge the source
- do not submit work that has been completed through collaboration or previously submitted for another assignment without permission from your instructor (These examples should be considered only as a guide and not an exhaustive list.)

WHERE CAN YOU TURN FOR HELP?

If you are ever unsure about any aspect of your academic work, contact me (or the TA):

- [Faculty of Health Professions Academic Integrity Website](#)
 - Overview of academic integrity process, with resources for faculty and students
- [Academic Integrity Website](#)
 - Links to policies, definitions, online tutorials, tips on citing and paraphrasing
- [Writing Centre](#)
 - Assistance with learning to write academic documents, reviewing papers for discipline-specific writing standards, organization, argument, transitions, writing styles and citations
- [Dalhousie Libraries](#)
 - Workshops, online tutorials, citation guides, Assignment Calculator, RefWorks
- [Dalhousie Student Advocacy Service](#)
 - assists students with academic appeals and student discipline procedures.

- Senate Office
 - List of Academic Integrity Officers, discipline flowchart, Senate Discipline Committee

WHAT WILL HAPPEN IF AN ALLEGATION OF AN ACADEMIC OFFENCE IS MADE AGAINST YOU?

As your instructor, I am required to report every suspected offence. The full process is outlined in the Faculty Discipline Flow Chart (www.dal.ca/dept/university_secretariat/academic-integrity.html) and includes the following:

- Each Faculty has an Academic Integrity Officer (AIO) who receives allegations from instructors
- Based on the evidence provided, the AIO decides if there is evidence to proceed with the allegation and you will be notified of the process
- If the case proceeds, you will receive a PENDING grade until the matter is resolved
- If you are found guilty of an offence, a penalty will be assigned ranging from a warning, to failure of the assignment or failure of the class, to expulsion from the University. Penalties may also include a notation on your transcript that indicates that you have committed an academic offence.

The Writing Centre <http://dal.ca.libguides.com/writingcentre>

Writing expectations at university are higher than you will have experienced at high school (or if you are entering a master's or PhD program, the expectations are higher than at lower levels). The Writing Centre is a Student Service academic unit that supports your writing development. Make an appointment to discuss your writing. Learning more about the writing process and discipline-specific practices and conventions will allow you to adapt more easily to your field of study.

To book an appointment: Email writingcentre@dal.ca or call 494-1963 or go to the Dalhousie homepage, log on to MyDal, and select the "Learning Resources" tab. You'll see the "Writing Centre" BOOK AN APPOINTMENT button.

Academic Accommodations:

If there are aspects of the design, instruction, and/or experiences within this course that result in barriers to your inclusion please contact the Student Accessibility Centre (dal.ca/access) and/or make arrangements to discuss with the instructor. Please note that your classroom may contain accessible furniture and equipment. It is important that these items remain in the classroom, undisturbed, so that students who require their use will be able to fully participate.

(retrieved from https://www.dal.ca/campus_life/academic-support/accessibility/Info_stafffaculty/for-your-syllabus.html)