

Pharmac 4AA3. Advanced Topics in Pharmacology 2016

Instructor: Dr. A.K. Grover, HSC 4N41, x22238, groverak@mcmaster.ca

General Learning Objectives: Gene therapy, Critical appraisal

Gene therapy: You will choose a disease of your interest and propose a gene therapy for it.

Step 1. You will develop background in: molecular biology, single nucleotide polymorphisms, microarray technologies, gene delivery technologies and vectors. These learning objectives may take a total of up to 4 sessions.

Step 2. Gene therapy research proposal will include in class brain storming sessions, 10 min presentation + 20 min feedback on individual proposals, 40 min presentation + 1 h feedback on detailed proposals and written proposals.

Critical appraisal: Often, while exploring a topic, a generally accepted paradigm becomes convenient and leads to a lack of critical appraisal questioning it. In the first few sessions, you will be assigned a paper each session to write briefly what you think is wrong with it. This will be followed by class discussion of the paper. For your own research proposal, you will assign two papers to the class – one for a learning objective of your topic and another for everyone to write what is wrong with that paper. In class discussion will follow. Following the 40 min presentation, you will write critique of the presentation to suggest what improvements can be made when they write their essays. The presenters will have to respond to each of your comments when they write the essays.

The learning theme and the course structure are based on the feedback from the 2014 and 2015 classes. The details will be finalized in the first class.

The written essay based on the presented topic, along with response to the critiques will be due on a deadline to be announced.

E-mail the essays and responses to critiques to groverak@mcmaster.ca or caloxins@gmail.com on or before the due date. Late penalty for the essays and responses to critiques: 15 percent per day.

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course communication sites weekly during the term and to note any changes.

Pharmac 4aa3 Proposed Assessment Scheme

(to be revised after discussion with class)

Criticism of assigned papers 12% (papers assigned with the problems plus those which each student will assign).

Critiques of presentations 16 % - A student presenting on one day will not write a critique (their own or the other student presenting that day). **Critiques due within 48 h, send by e-mail to the presenters with a cc to Dr. Grover.**

Problem 1 and 2 - reports 12% - what did you learn?

10 min presentations 10%

40 min presentations 25 %

Essay and response to critiques 25%. If the essay mark is better than the 40 min presentation, the weights of these two will become 35 and 15 % respectively.

Step 1: Proposal (10 min PowerPoint presentation, 20 min feedback)

Evaluation Criteria

Focused Research Question	2
Rationale – reasoning & background	3
Breakdown of topic to be explored	3
Organization of presentation	2

***Suggest reading materials to make it a learning objective for the whole class.**

Step 2: Presentation (PowerPoint presentation) 40

40 minute presentation, 60 minute question/discussion period/feedback

<u>Content</u>	
Background <i>(relevance)</i>	20
Rationale <i>(significance; logic? Curiosity? Thought process – WHY)</i>	10
Thoroughness <i>(of chosen FOCUS)</i>	10
Appropriateness of data presented & Critical Appraisal	20
Ability to answer questions/ facilitate discussion	15
Conclusion <i>(Did you address the question?)</i>	5
<u>Technical</u>	
Visual presentation <i>(visual aids, powerpoint)</i>	5
Clarity - Oral communication <i>(coherence, pacing)</i>	5
Organization <i>(outline)</i>	10
TOTAL	/100

For a total of 10 marks for the whole course:

Every group not presenting that day-

writes a brief criticism of the reading material and e-mails to Dr Grover ahead of time,

writes critique of the days topic/presentation (summary, strengths, weakness, and improvements).

Step 3: Essay (Criteria for Evaluation)

10 pages double spaced, excluding Abstract, Figures, Response to critiques, and References

<u>Content</u>	
Abstract (~250 words)	10
Lay abstract (~50 words)	5
Background & Rationale	20
Thoroughness (of chosen FOCUS)	5
Proposal details	20
Response to critique: Essay: includes response to critiques – separately indicate how each comment was either used to improve the essay or why it was not used	10
Conclusion (Did you address the question?)	5
Comprehensive scheme (originality)	15
<u>Technical</u>	
Grammar & Syntax	5
Organization & Coherence	5
TOTAL	/100