

New Course

Proposal Reference Number : 9157
 PRN Alias : 14-15#380
 Version No : 6
 Submitted By : Ms Chantal Grignon
 Edited By : Ms Chantal Grignon

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	New Data	
Program Affected?	Y	
Program Change Form Submitted?	Y	
Subject/Course/Term	PHAR 565 <ul style="list-style-type: none"> • one term 	
Credit Weight or CEU's	3 credits	
Course Activities	Schedule Type	Hours per week
	A - Lecture	3
	Total Hours per Week : 3 Total Number of Weeks : 13	
Course Title	Official Course Title :	Epigenetic Drugs and Targets
	Course Title in Calendar :	Epigenetic Drugs and Targets
Rationale	This course will be introduced to expose senior Pharmacology undergraduates to an emerging area in drug development and pharmacology research.	
Responsible Instructor	Dr. Jason Tanny	
Course Description	This course covers therapeutics targeting epigenetic mechanisms. Although only a handful of epigenetic drugs are in widespread use, further development of such agents is a very active area of research as it has the potential to directly target aberrant gene expression. This course will examine both the current use and potential of epigenetic drugs in treatment of cancer, neurological diseases, immune disorders, and cardiovascular disease. The concept of epigenetics as mediating gene-environment interaction will also be discussed.	
Teaching Dept.	0253 : Pharmacology and Therapeutics	
Administering Faculty/Unit	SC : Faculty of Science	

Prerequisites	PHAR 301. Web Registration Blocked? : N
Corequisites	
Restrictions	
Supplementary Calendar Info	
Additional Course Charges	
Campus	Downtown
Projected Enrollment	60
Requires Resources Not Currently Available	N
Explanation for Required Resources	
Required Text/Resources Sent To Library?	
Library Consulted About Availability of Resources?	
Consultation Reports Attached?	Y <ul style="list-style-type: none"> PHAR 565 Consultation Report Biochemistry.pdf View PHAR 565 Consultation Report Biology.pdf View
Effective Term of Implementation	201601
File Attachments	<ul style="list-style-type: none"> PHAR 565 Syllabus v2 Nov 21.pdf View
To be completed by the Faculty	
For Continuing Studies Use	

Approvals Summary

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Version No.	Departmental Curriculum Committee	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP	Version Status
6								Submitted to Curriculum/Academic Committee for approval Edited by: Chantal Grignon on: Nov 21 2014

PHAR 565
Epigenetic Drugs and Targets

Course description:

This course covers therapeutics targeting epigenetic mechanisms. Although only a handful of epigenetic drugs are in widespread use, further development of such agents is a very active area of research as it has the potential to directly target aberrant gene expression. This course will examine both the current use and potential of epigenetic drugs in treatment of cancer, neurological diseases, immune disorders, and cardiovascular disease. The concept of epigenetics as mediating gene-environment interaction will also be discussed.

Structure:

The course will cover 12 topics. Each week there will be a one and a half hour lecture introducing the topic, and a one and a half hour session consisting of small group presentations by students. Presentations will have both an oral and written component. There will be two student presentations per week, each carried out by a group of four to five students. Each group will present twice per term. In week 1 there will be an overview lecture in the first session and a “special topics” lecture in the second session.

Course reading materials and lecture slides:

The reading materials for this course will be review and/or primary data papers. All papers will be available in .pdf format on *MyCourses*. Lecture slides will be posted to *MyCourses* as .pdfs no later than the night before lecture [you should print copies of the slides as they will not be provided in class].

Evaluation:

- 1) *Small group assignments*: 50% of final grade
- 2) *Final examination*: 50% of final grade

Class schedule:

1. Course overview and introduction
2. Cancer I: HDAC inhibitors
3. Cancer II: DNMT and HMT inhibitors
4. Cancer III: BET family inhibitors
5. Cancer IV: microRNA's
6. Neuro I: Neurodevelopmental disorders
7. Neuro II: Neurodegenerative disorders
8. Immune I: Auto-immune diseases
9. Immune II: Inflammation and infection
10. Cardiac hypertrophy and heart failure: HDAC inhibitors, BET inhibitors
11. Cardiac hypertrophy and heart failure: microRNA's
12. Epigenetic therapy in pregnancy
13. Epigenetic toxicology

Course lecturers:

Dr. Jason Tanny (jason.tanny@mcgill.ca)
Dr. Jacquetta Trasler (jacquetta.trasler@mcgill.ca)
Dr. Sarah Kimmins (sarah.kimmins@mcgill.ca)
Dr. Moshe Szyf (moshe.szyf@mcgill.ca)
Dr. Nada Jabado (nada.jabado@mcgill.ca)

MCGILL UNIVERSITY POLICY STATEMENTS:

1) McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).

2) In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

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**CONSULTATION REPORT FORM
COURSE PROPOSALS**

DATE: October 17th 2014

TO: Dr. Albert Berghuis, Professor and Chair, Department of Biochemistry

FROM: Dr. Jason Tanny, Assistant Professor, Department of Pharmacology

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

Course: PHAR 565; Epigenetic Drugs and Targets (3 credits).

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal.

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:



Signature: John Silvius (Chair, Curriculum Cttee.)/Albert Berghuis (Department Chair)

Date: Oct. 21, 2014

CONSULTATION REPORT FORM
COURSE PROPOSALS

DATE: October 17th 2014

TO: Dr. Graham Bell, Professor and Chair, Department of Biology

FROM: Dr. Jason Tanny, Assistant Professor, Department of Pharmacology

The attached proposal has been submitted to the Curriculum/Academic Committee, and it has been decided that your department should be consulted.

Course: PHAR 565; Epigenetic Drugs and Targets (3 credits).

Would you be good enough to review this proposal and let me know as soon as possible, on this form, whether or not your department has any objections to, or comments regarding, the proposal.

NO OBJECTIONS

SOME OBJECTIONS

COMMENTS:

Circulated to Curriculum Committee. No objections reported.

Signature:



Date:

16 Nov 2014