Proposal Reference Number : 7412 PRN Alias : 13-14#825

Version No : 5

Submitted By : Ms Chantal Grignon Edited By : Ms Chantal Grignon

	New Data				
Program Affected?	Υ				
Program Change Form Submitted?	Υ				
Subject/Course/Term	PHAR 598				
	two consecutive terms (D1, D2)				
Credit Weight or CEU's	6 credits				
Course Activities	Schedule Type		Hours per week		
	PW - Project		9		
			Total Hours per Week: 9 Total Number of Weeks: 26		
Course Title	Official Course Title :	Hono	onours Pharma Research Proj.		
	Course Title in Calendar :	Hono Proje	urs Pharmacology Research		
Rationale	PHAR 598 is being created as a research course specifically for Honours students. PHAR 599D1/D2 will remain a Complementary course for students in the Pharmacology Minor and Major Programs.				
Responsible Instructor	Dr. Anne McKinney and Dr. Dusica Maysinger				
Course Description	Supervised Honours Research Project in Pharmacology. Students are expected to obtain hands-on research experience in their supervisor's laboratory. They are also required to submit a written report in the form of a scientific manuscript and present a ten minute seminar.				
Teaching Dept.	0253 : Pharmacology and Therapeutics				
Administering Faculty/Unit	SC : Faculty of Science				
Prerequisites					
Corequisites	PHAR 562 General Pharmacology 1 and PHAR 563 General Pharmacology 2. Web Registration Blocked? : N				
Restrictions	- Only open to U3 students accepted in the BSc. Honours Pharmacology. Requires Departmental approval Students must register for both PHAR 598 D1 and PHAR 598 D2. No credit will be given for this course unless both PHAR 598 D1 and PHAR 598 D2 are successfully completed in consecutive terms.				

Supplementary Calendar Info	Minimum of 9 hours/week to be spent in the lab A statement of the proposed project and method of evaluation, signed by the student and supervisor, must be submitted to the departmental Director of Undergraduate Studies for approval by the add/drop deadline of the semester in which the student registers for this course.
Additional Course Charges	
Campus	Downtown
Projected Enrollment	30
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?	N
Effective Term of Implementation	201409
File Attachments	 PHAR 598 New Outline.doc Supervisor-Evaluation PHAR 598.doc Pharmacology Honours Program-revision-form_Nov_19_2013.doc
To be completed by the Faculty	
For Continuing Studies Use	

Approvals Summary

Show all comments

Version No.	Departmental Curriculum Committee	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP	Version Status
5								Submitted to Curriculum/Academic Committee for approval Edited by: Chantal Grignon on: Nov 19 2013
4								Submitted to Curriculum/Academic Committee for approval Edited by: Chantal Grignon on: Nov 11 2013

3				Submitted to Curriculum/Academic Committee for approval Edited by: Chantal Grignon on: Nov 7 2013
2				Submitted to Curriculum/Academic Committee for approval Edited by: Chantal Grignon on: Oct 30 2013
1				Submitted to Curriculum/Academic Committee for approval Created on: Oct 24 2013

PHAR 598 – Honours Research Project in Pharmacology Course Outline (2014 - 2015)

Course Coordinators:

Dr. Dusica Maysinger

(tel: 398-1264; e-mail: dusica.maysinger@mcgill.ca; McIntyre, room 1314)

Dr. Anne McKinney

(tel: 398-5685; e-mail: anne.mckinney@mcgill.ca; Bellini, room 167)

Teaching Assistant:

TBA; McIntyre 1314

Overview of the course:

This course consists of a thesis-based research project involving laboratory work in a selected area of Pharmacology. The research topic should highlight a novel aspect or contribute new knowledge to the current field of research.

The project should be carried out under the supervision of a faculty/staff member in the laboratory, and will require a minimum of 9 hours per week over 2 semesters, or 16 hours per week over 1 semester, to be spent in the laboratory and/or library. Students will be required to actively participate in the research project through experimental work, as well as evaluating scientific articles, biological merit and significance.

At the end of the course, the student must submit a **written report** in the form of a scientific manuscript and present a **10-minute seminar** to a panel of evaluators (including the supervisor, coordinators and teaching assistant).

Method of evaluation:

- 1) Manuscript submission (50%)
- 2) Seminar presentation (25%)
- 3) Supervisor evaluation (25%)

Manuscript Submission (50%)

A written report should be submitted in the form of a manuscript, drafted according to the guidelines of a relevant, high impact journal as determined by the supervisor and course coordinators. The written report should be no longer than 20 typed pages (double-spaced) and should include these sections: Abstract, Introduction, Methods, Results (+ Figures and Tables), Discussion and References.

It will be evaluated by the supervisor and course coordinators, who will subsequently meet with the student for an informal discussion of the report.

Seminar Presentation (25%)

At the end of the term, students will present and summarize their research and findings in a 10-min oral presentation (slide show presentation). Evaluation of the seminar will be as follows:

1)	Rationale (and understanding) of research topic	5%
2)	Preparation and general knowledge regarding the research field 5%	
3)	Ability to critically analyze the student's own and other's data	5%
4)	Ability to answer questions	5%
5)	Clarity of presentation	5%

At mid-term, students will meet informally with the course coordinators/TA to discuss his/her progress in the research project. Students are also encouraged to submit a **Summary Research Proposal** to the TA (more instructions to follow).

Supervisor Evaluation (25%)

Ongoing evaluation of the students will be carried out by the faculty/staff member responsible for supervising the project.

***All course material will be available on *myCourses*: http://www.mcgill.ca/mycourses/
Students are responsible for understanding the importance of academic integrity (http://www.mcgill.ca/students/srr/honest/students/http://www.mcgill.ca/integrity/studentguide/). Academic integrity is important. Anything that undermines the evaluation process at McGill undermines the value of your degrees. McGill's Code of Student Conduct and Disciplinary Procedures appears in the Handbook on Student Rights and Responsibilities(GreenBook);

http://www.mcgill.ca/students/srr/academicrights/integrity/cheating/) Article 15(a) of the Code, which is devoted to plagiarism, reads as follows:

No student shall, with intent to deceive, represent the work of another person as his or her own in any academic writing, essay, thesis, research report, project or assignment submitted in a course or program of study or represent as his or her own an entire essay or work of another, whether the material so represented constitutes a part or the entirety of the work submitted. These rules concern information obtained from any source (e.g., books, journal articles, the Internet, other students) and apply to any written submission (term papers, essays, assignments, take-home exams and lab reports).

<u>Supervisor Evaluation - PHAR 598</u> <u>Honours Pharmacology Research Project</u>

NAME OF STUDENT:				
Course	number & Year:			
	check the sentence that best characterizes your student for the following The supervisor evaluation is 25% of the final grade.			
	student worked in the lab for an average of:			
	0 - 4 hours per week 5 - 10 hours per week			
	11 - 20 hours per week			
	20 hours or more per week			
	Cannot evaluate			
2. Pleas	se estimate the number of papers that the student read related to their project.			
	10-19			
	20-29			
	30-39 40 or more			
	Cannot evaluate			
-	uantity of experimental work achieved was:			
	Insufficient			
	Minimum			
	Average Excellent			
	Outstanding			
	Cannot evaluate			
4. Qualit	ty of experimental work. The student:			
	Was unable to perform experiments			
	Had difficulties in learning to perform techniques un-aided			
	Was able to perform experiments un-aided but needed a lot of help to get started			
	Was able to repeat experiments after being shown one time how to do them			
	Was able to repeat and modify experiments			
	Was able to develop experimental techniques which were not done in the laboratory			
	Cannot evaluate			

□ W □ H □ W □ P □ up □ P □ fo □ P	Vas unable to interpret results un-aided lad difficulties to interpret results Vas able to interpret results with relative ease resented excellent abilities to interpret results but was not able to suggest follow pexperiments resented excellent abilities to interpret results and was able to suggest logicallow-up experiments resented exceptional abilities to interpret results and was able to proposition of the proposition of th	cal
□ P ₀ □ D □ D □ D	of discussions with the student. By the end of the term the student: coor understanding of the project and experiments demonstrated a superficial understanding of the project and experiments demonstrated a good understanding of the project and experiments demonstrated an excellent understanding of the project and experiments demonstrated and outstanding understanding of the project and experiments demonstrated and outstanding understanding of the project and experiments demonstrated and outstanding understanding of the project and experiments	
N K K W K	of record keeping (lab book). The student: lever kept any record of the work performed lept very messy records of the work performed lept good records only under supervision of the work performed lever supervision of the work performed lever supervision of the work performed lever an exemplary note book leannot evaluate	
□ H □ G □ W □ H st	munication skills. The student: lad major communication problems sot on with other lab members and was able to function in a team Vas able to communicate efficiently with other lab members lad excellent communication abilities both in the laboratory and with supervisor lad outstanding communication abilities both in the laboratory and with his supervisor, and always had time to help others cannot evaluate	his
□ W□ D□ D□ D	on for the project. The student Vas very un-motivated and disinterested or distracted vid the minimum amount of work. Demonstrated good motivation Demonstrated very good motivation Demonstrated excellent motivation, keenness and an aptitude to ask questions. Cannot evaluate	

10. The student handed in a draft of their report 1 week in advance of the fina submission deadline ☐ Yes ☐ No
11. The student prepared and presented a draft of their power point presentation week in advance of the final submission deadline Section 1. Yes No
Comments: Please indicate any specific qualities or concerns that you have about the student that whelp the committee make their final evaluation of the Student. Also mention any special needs or circumstances that we should be made aware of. Finally, if you are supervising more than one student, we would appreciate a candid comparative evaluation of the abilities.
Supervisor Name
Department Signature
Date