:4018

Proposal Reference

Number **PRN Alias** : 11-12#974 Version No :5 Submitted By : Ms Nancy Nelson Edited By : Ms Josie D'Amico **Display Printable PDF** New Data Y **Program Affected?** N (Simple Change) - Please add to the "Other Suggested **Program Change Form** Courses" list in the Biology Concentrations, under the Submitted? "Molecular Genetics and Development Concentration." Additionally, please add this course to the Complementary Courses list for Major in Anatomy & Cell Biology, under "12 credits of biologically oriented courses (BOC) selected from," to the Honours in Anatomy & Cell Biology, under "3 credits of biologically oriented courses (BOC) selected from," and to the Major in Physiology, under "Upper Level Science (ULS) Courses." **BIOL 546** Subject/Course/Term one term Credit Weight or CEU's 3 credits **Course Activities** Schedule Type Hours per week MW - Seminar 3 Total Hours per Week : 3 Total Number of Weeks: 13 Course Title Official Course Title : Genetics of Model **Systems** Genetics of Model Course Title in Calendar : **Systems** The genetics and molecular genetics of model systems is Rationale one of the principal approaches used worldwide by researchers in the life sciences and is the main specialty of the researchers in the Cell and Molecular group of the Biology Department. However, owing to the number of different systems and the increasing complexity and sophistication of the methods and concepts used in molecular genetics, this subject is insufficiently covered in lower level courses such as 202, 300, and 303. The new course will fill this gap. It also will help to broaden the horizon of graduate students that are already engaged in studies that take advantage of one particular model system. Siegfried Hekimi **Responsible Instructor** Topics in the genetics and molecular genetics of **Course Description** unicellular, plant, invertebrate and vertebrate models systems.

New Course

Teaching Dept.	0286 : Biology
Administering Faculty/Unit	SC : Faculty of Science
Prerequisites	BIOL 202 and BIOL 300; BIOL 303 recommended Web Registration Blocked? : N
Corequisites	
Restrictions	
Supplementary Calendar Info	 Fall course given every second year, alternating with BIOL 544; enrollment limited to 15 students
Additional Course Charges	
Campus	Downtown
Projected Enrollment	12
Requires Resources Not Currently Available	Ν
Explanation for Required Resources	
Required Text/Resources Sent To Library?	
Library Consulted About Availability of Resources?	
Consultation Reports Attached?	
Effective Term of Implementation	201209
File Attachments	No attachments have been saved yet.
To be completed by the Faculty	
For Continuing Studies Use	

Approvals Summary

Show all comments

Version	Departmental	Departmental	Departmental	Other	Curric/Academic	Faculty	SCTP	Version Status
No.	Curriculum	Meeting	Chair	Faculty	Committee			
	Committee							

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					D'Amico on: Mar 7 2012
4					Approved by Department Meeting Edited by: Nancy Nelson on: Mar 6 2012
3					Approved by Department Meeting Edited by: Josie D'Amico on: Mar 2 2012
2		Approved Nancy Nelson Meeting Date: Feb 28 2012 Approval Date: Feb 29 2012 View Comments			Approved by Department Meeting Edited by: Nancy Nelson on: Feb 29 2012
1	Approved Frederic Guichard Meeting Date: Feb 28 2012 Approval Date: Feb 28 2012 View Comments				Approved by Departmental Curriculum Committee Created on: Feb 28 2012

Course description BIOL 546 proposed Feb 27/12

Instructor: S. Hekimi W5/29 (514) 398 6440 siegfried.hekimi@mcgill.ca

Workload: 3 credits

Prerequisites: BIOL 202, 300 or permission; BIOL 303 recommended

Content:

The course will provide an introduction to the genetics and molecular genetics of unicellular, plant, invertebrate and vertebrate model systems, including, among others, E. coli, yeast, Arabidopsis, Caenorhabditis, Drosophila, Zebrafish, and mice. We will examine the characteristics of each system, how the systems have been most successfully used (their advantages and disadvantages) and, using chosen topics, how findings with these systems are shaping our understanding of basic principles in the life sciences.

Readings:

Recent research articles and reviews. No textbook will be used.

Method:

Each new topic will be introduced by a lecture by the instructor or an invited lecturer specialized in the use of the particular model system or topic. The following classes will be devoted to student seminars and critical discussions of recent research articles.

Evaluation: One long