

School of Graduate Studies

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February 6, 2012

To : Members of the Faculty of Science Graduate Curriculum, Policy, Admissions and

Study Committee

From: Medy Espiritu

Assistant Secretary and SynApps System Administrator

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The next meeting of the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee will be held on **Monday, February 13, 2012** at **1:30 p.m.** in **MUSC-318**.

Listed below are the agenda items for discussion.

Please email espiritu@mcmaster.ca if you are unable to attend the meeting.

AGENDA

- I. Minutes of the meeting of April 15, 2011
- II. Business arising
- III. Graduate curriculum revisions

Chemistry (Dr. Alex Adronov)

Ph.D. program – change in the calendar description of the Comprehensive Examination Procedure

#734 – Applications of Mass Spectrometry – course cancellation

#737 – Mass Spectrometry Theory – change in course title

#740 - Basic Theory of NMR - change in course title

#741 – Two Dimensional NMR Spectroscopy – course cancellation

Geography and Earth Sciences (Dr. Altaf Arain)

- *6CC3 Environmental Reconstruction Using Stable Isotopes new course (undergraduate course for graduate credit)
- *6EA3 Environmental Assessment new course (undergraduate course for graduate credit)

Kinesiology (Dr. Stuart Phillips)

*706 - Cardiac Rehabilitation - course cancellation

*710 – Exercise and Skeletal Development: A Lifespan Perspective – course cancellation

Mathematics (Dr. Manfred Kolster)

New courses (undergraduate courses for graduate credit):

*6FM3 - Financial Markets and Derivatives

*6FT3 - Topics in Differential Equations

*6MB3 - Mathematical Biology

Course cancellations:

*6G03 – Dynamical Systems

*6K03 – Mathematics of Finance

Statistics (Dr. Manfred Kolster)

*6U03 – Nonparametric Methods in Statistics – course cancellation

Medical Physics and Applied Radiation Sciences (Dr. Tom Farrell)

Change in course requirements:

M.Sc. Radiation Sciences (Medical Physics)

M.Sc. Radiation Sciences (Radiation Biology)

M.Sc. Health and Radiation Physics

*6U03 – Radiation Biology – course cancellation

Physics and Astronomy (Dr. Alan Chen)

Change in course description:

#715 – Mathematical Introduction to Fluid Mechanics

#716 – Incompressible Computational Fluid Dynamics

Psychology, Neuroscience and Behaviour (Dr. Bruce Milliken)

Ph.D. program – change in admission requirements

FACULTY OF SCIENCE GRADUATE CURRICULUM, POLICY, ADMISSIONS AND STUDY COMMITTEE APRIL 15, 2011, 1:30 P.M.

MUSC-318

PRESENT: Dr. D. Welch (Chair), Dr. A. Adronov, Dr. A. Arain, Dr. P. Bennett, Dr. K. Dalnoki-Veress, Dr. T. Farrell, Dr. N. Kevlahan, Ms. M. Selvamenan, Mr. C. Teeter, Mrs. M. Espiritu (Assistant Secretary)

BY INVITATION: Dr. N. Balakrishnan, Dr. E. Weretilnyk

REGRETS: Dr. S. Phillips, Dr. J-P Xu

I. Minutes of meeting

The minutes of the meeting of April 22, 2011 were approved on a motion by Dr. Kevlahan, seconded by Mr. Teeter.

II. Business arising

There was no business arising from the previous meeting.

III. Curriculum recommendations

Biology

The Department of Biology proposed the following graduate curriculum revisions.

Change from Biology *6DD3 to Molecular Biology *6DD3 Change from Biology *6H03 to Molecular Biology *6H03 Change from Biology *6P03 to Molecular Biology *6P03

Course cancellations:

*6Y03 – Ecology of Inland Waters 764 – Ultrastructure of Cells

New course:

*6YY3 – Ecology and Management of Coastal Waters

Dr. Dalnoki-Veress moved, and Dr. Kevlahan seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the proposed graduate curriculum revisions from the Department of Biology, as described in the documents."

The motion was carried.

Chemistry

The Department of Chemistry requested to cross-list the Computational Engineering and Science course, *6PB3 – Computational Models for Electronic Structure and Chemical Bonding.

Dr. Adronov moved, and Dr. Farrell seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the cross-listing of Computational Engineering and Science course, *6PB3 – Computational Models for Electronic Structure and Chemical Bonding, as Chemistry *6PB3."

The motion was **carried**.

Geography and Earth Sciences

The School of Geography and Earth Sciences proposed the following changes to its graduate curriculum.

New courses:

- *758 Advanced Structural Geology
- *759 Numerical Modelling in Global Climatology

Course cancellations:

- *6003 Environmental Isotope Geochemistry
- *6Q03 Sedimentary Geochronology
- *6S03 Advanced Topics in Spatial Statistics

Dr. Kevlahan moved, and Ms. Selvamenan seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the proposed graduate curriculum changes from the School of Geography and Earth Sciences, as described in the documents."

For course *759 – Numerical Modelling in Global Climatology, Dr. Welch commented that all undergraduate courses in climatology that are prerequisites to this course should be listed in the form.

The motion was **carried**, subject to the additional information required for *759.

Kinesiology

The Department of Kinesiology has proposed the cancellation of course *716 – Skeletal Muscle Cell Biology and Clinical Myology. The instructor no longer has the time or resources to offer this course, and another instructor in the department is offering a similar course.

Dr. Dalnoki-Veress moved, and Dr. Kevlahan seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the cancellation of Kinesiology *716 – Skeletal Muscle Cell Biology and Clinical Myology, as described in the document."

The motion was **carried**.

Mathematics

The following graduate curriculum changes were proposed for the Mathematics programs.

Change in course requirements for the Ph.D. program – reduce course requirements for Ph.D. students who have already fulfilled the M.Sc. course requirements

Change in course requirements for the M.Sc. program

New courses:

*749 – Mathematical and Computational Fluid Dynamics (to be cross-listed as CES *749)

#778 - Applied Computational Finance I

#779 - Applied Computational Finance II

Change in course title and description: *711 - Model Theory

Course cancellations: *773 – Applied Computational Finance

Dr. Farrell moved, and Dr. Adronov seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the proposed graduate curriculum changes for the M.Sc. and Ph.D. programs in Mathematics, as described in the documents."

Dr. Kevlahan said his department is proposing to reduce the minimum course requirement for Ph.D. students from four one-term courses beyond the M.Sc. level to two one-term courses. He explained that the current policy requires students who have completed the M.Sc. in mathematics to complete a minimum of 10 one-term courses during their Ph.D. and M.Sc. studies. He further said the minimum is in need of modification given the range of appropriate courses currently offered and the fact that essentially all Ph.D. students enter through the M.Sc. program (either by transferring or completing an M.Sc.).

Dr. Kevlahan stated that his department has also proposed adding an M-phimac option to the M.Sc. program and updating the Ph.D. course requirement to two courses for those students transferring from the M.Sc.

The motion was **carried**.

Statistics

The following graduate curriculum changes were proposed for the Statistics program:

Change in course requirements for the M.Sc. program – Statistics *770 will be a required course

Dr. Balakrishnan explained that the department is proposing to make Statistics *770 a required course for the Statistics M.Sc. program. Dr. Balakrishnan further explained that the course will assist graduate students in Statistics in developing technical report writing skills. In addition, the course would effectively introduce research components into the Coursework Option, which was one of the concerns raised in the recent OCGS evaluation of the M.Sc. program in Statistics.

New course:

*721 – Statistical Modelling in Practice

Dr. Balakrishnan explained that the new course, *721, would be required by students in the Financial Mathematics option.

Change in course description:

*770 - Statistics Seminar

Dr. Balakrishnan explained Statistics *770 is being proposed as a required course for the M.Sc. Statistics program. The proposed change in the description of this course is necessary since it explains that the course consists of the seminars delivered in the weekly seminar series, as well as the reports on selected seminars that graduate students must prepare and submit for evaluation. In this process, the research component can be introduced for all students in the Masters program irrespective of whether they are in the thesis option or in the course work option.

Dr. Dalnoki-Veress moved, and Dr. Farrell seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the proposed graduate curriculum changes for the M.Sc. Statistics program, as described in the documents."

The motion was **carried**.

Medical Physics and Applied Radiation Sciences

The Department of Medical Physics and Applied Radiation Sciences has proposed the following graduate curriculum changes.

Change in course title and description:

*770 – Medical Imaging Systems I (to be cross-listed as Biomedical Engineering *770 and Electrical and Computer Engineering *780)

Change in course description:

*776 – Introduction to Operational Health Physics

Request to cross-list a course:

Biomedical Engineering *702 – Medical Imaging Systems II (to be cross-listed as Medical Physics *702)

Dr. Farrell moved, and Mr. Teeter seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the graduate curriculum changes proposed by the Department of Medical Physics and Applied Radiation Sciences, as described in the documents."

The motion was carried.

Psychology, Neuroscience and Behaviour

The Department of Psychology, Neuroscience and Behaviour has proposed the cancellation of course, *721 – Scientific Ethics and Professional Issues. Dr. Bennett explained that the course is no longer taught because the content overlaps significantly with SGS #101.

Dr. Bennett moved, and Dr. Farrell seconded,

"that the Faculty of Science Graduate Curriculum, Policy, Admissions and Study Committee approve the recommendation of the Department of Psychology, Neuroscience and Behaviour to cancel course *721 – Scientific Ethics and Professional Issues, as described in the document."

The motion was **carried**.

There was no other business and the meeting adjourned at 2:15 p.m.



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / PROCEDURES

PLEASE READ T	HE FOLLOWING NOTES	BEFORE COMPI	LETING THIS FORM:
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 This form must be completed for <u>ALL</u> changes involving degree program requirements/procedures. <u>All</u> sections of this form must be completed.

2. An electric (Email: 6	es <i>piritu</i> @ <i>n</i> entative fro	on of this ncmaste om the o	e <i>r.ca</i>). departm	ent is	requ	iired	to atte		Curriculur	•	Apps System A	Administrator ttee meeting du	ring whic	h		
DEPARTMENT Chemistry and Chemical Biology																
NAME OF PROGRAM		Chem	nistry													
PROGRAM DEGREE	Ph.D. ()	Ph.D. (X) M.A. ())	M.A.Sc.		c.	M.B.A. ()	M. Eng.		M.Sc. ()	Diploma Program ()	Othe (Speci	-		
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)																
CHANGE IN REQUIREME		ON				CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE					CHANGE IN COURSE REQUIREMENTS					
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR							X Some text clarifying what is required from students as part of their comprehensive examination has been inserted into the calendar copy.									
OTHER CHANGES	EXPL	_AIN:														
DESCRIBE 1									AIGE (Asso			if annua is no				

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (Attach additional pages if space is not sufficient.)

The new text is as follows:

All Ph.D. candidates must pass a Comprehensive Examination, taken within the first 20 months after beginning Ph.D. work, that tests breadth of knowledge within the student's major field of study. The Comprehensive Examination will require the submission of a document that provides a review of a relevant, current field of research, along with an original proposal for research. The defence will consist of a brief presentation, followed by an oral examination.

The original text was:

All Ph.D. candidates must pass a Comprehensive Examination that tests breadth of knowledge within the studentcs major field of study.

RATIONALE FOR THE RECOMMENDED CHANGE:												
Clarification of the process												
PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)												
Sept., 2012												
ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE												
SHOULD BE AWARE OF? IF YES, EXPLAIN.												
No												
PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:												
See above												
CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:												
Names Alay Advancy - Emails advancy@memoster.co - Extensions 22514 - Date: Ech. 6, 2012												
Name: Alex Adronov Email: adronov@mcmaster.ca Extension: 23514 Date: Feb. 6, 2012												
Name: Alex Adronov Email: adronov@mcmaster.ca Extension: 23514 Date: Feb. 6, 2012												

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/Medy/2011



1. This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. 2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.													
DEPARTMENT/PROGRAM Chemistry													
COURSE TITLE		Applications	of Mass	Spect	trometry	,							
COURSE NUMBER	734	FULL	FULL COURSE () HALF COURSE () QUARTER (MODULE) (X)										
INSTRUCTOR(S)	Terlouw	,		•				` '	,				
PREREQUISITE(S)													
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
NEW DATE TO BE OFFERED: WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? IF YES, PROVIDE THE DATE:													
WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). Note: Cross-Listing of courses requires approval from Each Department and Faculty concerned.													
CHANGE IN COURSE TITLE		Provide the	E CURREN	т Сои	IRSE TITL	E:							
CHANGE IN COURSE DESCRIPTION			600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form										
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OTHER	EXPLAIN:												
BRIEF DESCRIPTION Calendar.	FOR C	ALENDAR - F	Provide a	brief	descri _l	ption <i>(maxim</i>	um 6 lin	es) to be i	ncluded in the Graduate)			
CONTENT/RATIONAL texts to be used.	E - Prov	ride a brief de	escriptio	n, i.e.	, outline	e the topics o	r major	sub-topic	s, and indicate the princ	ipal			

	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
gra	DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the <u>Extra Work</u> to be required of duate students, i.e., exams, essays, etc.)
	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PLI	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Naı	me: Alex Adronov Email: adronov@mcmaster.ca Extension: 23514 Date: Feb. 11, 2010

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SGS/December 2006



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DEPARTMENT/PROGRAM Chemistry												
COURSE TITLE		Mass Sp	oectrometry									
COURSE NUMBER	737	EI	FULL COURSE () HALF COURSE () QUARTER (MODULE) (X)									
INSTRUCTOR(S)	Green,	1	JLL COURS)E ()	HALF COU	KOE _	()	QUARTER (MODUL	E) (X)		
PREREQUISITE(S)												
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)												
NEW DATE TO BE OFFERED: WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? NO IF YES, PROVIDE THE DATE:												
WILL THE COURSE BE <u>Cross-listed</u> with Another Department? If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires approval from <u>each</u> department and faculty concerned.												
CHANGE IN COURSE TITLE	x		etrometry T		RSE TITL	E:						
CHANGE IN COURSE DESCRIPTION				600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								
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OTHER	EXPLAIN:											
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CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.												

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2. EXPECTED ENROLMENT:
3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
Assignments, midterm, and final exam. Extra work required of graduate students will take the form of an extra assignment as well as a class presentation and/or written report describing an advanced topic in the field or an original research proposal. The instructor may substitute these requirements with a suitable alternative where necessary.
5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Name: Alex Adronov Email: adronov@mcmaster.ca Extension: 23514 Date: Feb. 12, 2010

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DEPARTMENT/PROGRAM Chemistry													
COURSE TITLE Basic Theory of 1D & 2D NMR Spectroscopy													
COURSE NUMBER	740		COURSE CREDIT										
INSTRUCTOR(S)	Berno, E	l .	COURSE	()	<u> </u>	HALF COU	RSE)	QUARTER (MODI	JLE)	(X)	
PREREQUISITE(S)													
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
NEW DATE		Was the Proposed Course Offered on Dean's Approval? NO If Yes, Provide the Date:											
WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). Note: Cross-Listing of courses requires approval from Each Department and faculty concerned.											NCE		
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CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.													

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2. EXPECTED ENROLMENT:
3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
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PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
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DEPARTMENT/PROGRAM Chemistry												
COURSE TITLE		Two dimens	ional NM	R Spe	ctroscop	ру						
COURSE NUMBER	741	FULL	COURSE CREDIT LL COURSE () HALF COURSE () QUARTER (MODULE) (X)									
INSTRUCTOR(S)	Hughes	•	<u> </u>		,	11111111111111		<u> </u>	(_(^,		
PREREQUISITE(S)												
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)												
NEW DATE		Was the Proposed Course Offered on Dean's Approval? If Yes, Provide the Date:										
WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). Note: Cross-Listing of courses requires approval from Each Department and faculty concerned.												
CHANGE IN COURSE TITLE		Provide THE	E CURREN	т Сои	RSE TITL	E:						
CHANGE IN COURSE DESCRIPTION				600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								
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COURSE CANCELLATION		IDE THE REASO Instructor teac										
OTHER	Explain:											
BRIEF DESCRIPTION Calendar.	FOR CA	LENDAR - F	Provide a	brief	descrip	otion (maxim	um 6 lin	es) to be i	included in the Graduate			
CONTENT/RATIONAl texts to be used.	CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.											

	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
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Naı	me: Alex Adronov Email: adronov@mcmaster.ca Extension: 23514 Date: Feb. 11, 2010

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PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:													
	(Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this												nic.
recommendation for change in graduate curriculum will be discussed.													
DEPARTMENT	/PROG	RAM	School of G	eography	and	Earth S	ciences/Facul	ty of Scie	ence				
COURSE TITLE Environmental Reconstruction Using Stable Isotopes													
COURSE NUMI	DED	6CC3		COURSE CREDIT									
COURSE NOW!	DEN	6003	FULL	FULL COURSE () HALF COURSE (X) QUARTER (MODULE) ()									
INSTRUCTOR(S)	Sang-T	ae Kim										
PREREQUISITE	E(S)	Permiss	sion of the ins	tructor									
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
NEW COURSE X DATE TO BE OFFERED: Was THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? If YES, PROVIDE THE DATE:													
WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? NO IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH													
THE OTHER DEPARTMENT(S). Note: Cross-listing of courses requires written approval from <u>each</u> department and faculty													
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	_	EXPLAIN:											
OTHER CHANGES			est this course be extra wor				a gradute co	urse, with	n the base b	eing Earth Sc/E	Envir Sc 40	C3.	
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Calendar.							,						
Stable isotopes													
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1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
lect	tures
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, icate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
	Class Quizzes (5%), Laboratory Participation/Exercises (15%), Assignment (15%), Mid Term (20%), Final Exam (25%) graduate students or 600-level course: Literature Review (20%)
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PL	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Naı	me: Ann Wallace Email: wallann@mcmaster.ca Extension: 23535 Date: Jan 25, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/Medy/2011



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DEPARTMENT/PI	ROG	RAM	SGES (Sch	ool of Geography and E	arth Sciences)/Fa	aculty	y of Scienc	e	
COURSE TITLE			Environmen	ntal Assesment					
COURSE NUMBE	R	6EA3	FULL	COURSE ()	COURS HALF COURS		REDIT (x)	QUARTER (MODULE)	()
INSTRUCTOR(S)		Mauree	n Padden				•		
PREREQUISITE(S)	No							
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OTHER X	V to	o qualify t	XPLAIN: //e are asking for this to be a grad course, with the base being 4EA3. There will be extra work from the instructor of qualify this as a grad course.						
Calendar. Technical and poli	BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar. Fechnical and policy issues involved in the production and the appraisal of environmental impact assessments. Fivo lectures, one lab; one term.								
CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.									

1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
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3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
lect	rures
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION: (For 600-level course, indicate the <u>Extra Work</u> to be required of duate students, i.e., exams, essays, etc.)
lab	debate 6%, short paper 18%, midterm 12%, final exam 24%, term paper for 600-level students 40%
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
No	
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
Yes	S .
PL	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Naı	me: Ann Wallace Email: wallann@mcmaster.ca Extension: 23535 Date: October 21/11

If you have any questions regarding this form, please contact the Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/medy

McMASTER UNIVERSITY SCHOOL OF GEOGRAPHY AND EARTH SCIENCES COURSE INFORMATION SHEET FALL 2011

1. BASIC COURSE INFORMATION

Course: Environmental Assessment Geog/Earth Sc/Envir Sc 4EA3

Lecture Time: Monday and Thursday, 4:30-5:20

Lecture Location: ABB 102

Labs:

Section 1: Wednesday, 1:30 - 2:20 in BSB B138 Section 2: Thursday, 3:30 - 4:20 in BSB B138 Section 3: Tuesday, 10:30 - 11:20 in BSB B138 Section 4: Monday, 3:30 - 4:20 in BSB B142

Prerequisites: Geog 2EI3, Earth Sc 2EI3 or registration in Honours Biology, a Civil Engineering program, an Engineering and Society program or an Honours program in the School of Geography and Earth Sciences

Note: The last day to withdraw and get a refund of fees is September 21

2. INSTRUCTOR INFORMATION

Instructor: Dr. Maureen Padden

Office: GSB 205

Phone: (905) 525-9140 ext. 20118 Email: paddenm@mcmaster.ca Office Hours: Monday, 10-12

3. VERY IMPORTANT DATES

Lecture Midterm: Thursday, Oct. 15 (in class)

Final Exam: TBA (Scheduled by the Registrar)

4. COURSE CONTENT, OBJECTIVES AND ORGANIZATION

Course Content and Objectives

Environmental assessments are widely applied tools in the environmental industry in Canada to identify and mitigate potential negative consequences of proposed projects. We'll explore the stages and techniques used in environmental assessments in Canada and apply them to both completed environmental assessments and current, on-going assessments.

The learning outcomes for this course are summarized below:

1. You will understand the process of environmental assessments in Canada.

- 2. You will learn to critically assess the information provided to the public about environmental assessments.
- 3. You will be able to state a persuasive opinion on a current environmental project and back it up with an evidence-based argument.

Course Organization

This course involves two 50-minute lectures per week and one 50-minute lab period. Assessment will be in the form of two tests (one during the semester and one in the final exam period), lab debates and a major project. The project will be peer-reviewed before final submission. The lecture schedule for this course outlines what topics will be covered and when they will be covered during the term. Please note that the lecture schedule will likely be modified throughout the term as some topics may not be finished in the predicted lecture time.

Geog/Earth Sc/Envir Sc 4EA3 Lecture Schedule*

Week	Lecture	Date	Chapter	Topic	Labs	Hand-in?	
1	1	Sept. 10		Introduction to course			
	2	Sept. 15	1	EIA aims and	1 Using Env.		
2				objectives	Registries	no	
	3	Sept. 17	2	EIA in Canada	rregistries		
3	4	Sept. 22	2	EIA in Canada	2 Debate I	marked in lab	
<u> </u>	5	Sept. 24	3	EIA classification	2 Debate 1	markeu in iab	
4	6	Sept. 29	4	Methods I	3 Debate II	marked in lab	
	7	Oct. 1	4	Methods II	3 Debate II	marked in lab	
5	8	Oct. 6	5	Screening	4 Debate III	marked in lab	
	9	Oct. 8	6	Scoping	4 Debate III	marked in lab	
6	10	Oct. 13		Review			
0	11	Oct. 15		Midterm			
7		Oct. 20	7	Prediction I			
,	12	Oct. 22	7	Prediction II			
8	13	Oct. 27	8	Impact Significance			
0	14	Oct. 29	9	Managing Impacts I			
	15	Nov. 3	9	Managing Impacts II	5 Summary of		
9	16	Nov. 5	10	Post-decision	EA	yes	
				Monitoring I			
	17 Nov. 1		10	Post-decision	6 Draft of letter		
10				Monitoring II	to peers	yes – to peers	
	18	Nov. 12	11	Cumulative Effects I	10 pools		
	19	Nov. 17	11	Cumulative Effects II			
11		Nov. 19	12	Strategic	7 Peer review	yes – to peers	
	20			Environmental	of draft letter	, , , , , , , , , , , , , , , , , , , ,	
		N. 04	10	Assessment I			
	04	Nov. 24	12	Strategic			
12	21			Environmental	8 final letter	yes	
	22	Nov. 26		Assessment II	-		
	23	Dec. 1		tba			
13	23				-		
	∠ 4	Dec. 3		Review			

^{*}Lecture schedule may be subject to change throughout the term.

5. TEXTBOOK AND RESOURCE MATERIALS

Recommended Text Books:

Introduction to Environmental Impact Assessment: A Guide to Principles and Practice by Bram F. Noble (available in University Bookstore)

Resource Materials:

Lecture notes (available on the course website)
Online web resource links may be posted on the course website

6. CLASSROOM CONDUCT

This is a large class but you are not a small part of it! To make our time together as valuable as possible, we both have to work hard at it. It is important that the classroom and lab learning environment is one of mutual respect and I will do everything I can to create that environment for you. Please note the following basic statements below for my expectations of student conduct.

- 1. Every student has the right to learn as well as the responsibility not to deprive others of their right to learn.
- 2. Every student is accountable for his or her own actions.
- 3. Please arrive on time and do not schedule other activities during class or lab time. Late arrivals and early departures are very disruptive.
- 4. In order to get the most out of this class please attend all scheduled classes and labs. I will try to make class as interesting and informative as possible, but I can't learn the material for you.
- 5. Please let me know immediately if you have a problem that is preventing you from performing satisfactorily in this class.

Below is what you can expect of me this semester.

- 1. I will treat you with respect and I will try to make my expectations clear.
- 2. I will be respectful of your schedule and start and end class on time.
- 3. I will be available to you for help outside of classroom times should you want to review concepts that you do not understand or learn material beyond the course content.
- 4. I will manage classroom disruptions to the best of my ability so that you have a safe and distraction-free learning environment.

7. ASSESSMENT AND GRADING

The distribution of marks in this course is as listed below:

In-lab Debate 10% (9% for debate performance, 1% for feedback)

Midterm Test 20% Assignment 30%

Final Exam 40% (all course material – cumulative)

Final grades will be changed should an error in grade addition or grade entry occur. If there is an error in your final grade contact the instructor immediately.

The Registrar schedules all deferred final exams. If you miss or leave an examination for medical reasons you must submit a Petition for Special Consideration form with supporting documentation of illness, personal or family reasons, to the Office of the Associate Dean normally within five working days of the missed examination.

8. ACADEMIC DISHONESTY

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of a academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at

http://www.mcmaster.ca/senate/academic/ac_integrity.htm

The following illustrates only three forms of academic dishonesty: Plagiarism, e.g. the submission of work that is not one's own or for whichother credit has been obtained. Improper collaboration in group work. Copying or using unauthorized aids in tests and examinations.

9. ETHICS STATEMENT

If you agree, your course work may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested.

10. COURSE MODIFICATIONS

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 websites weekly during the term and to note any changes.

If you have any questions regarding the course outline please contact me at any time. I am looking forward to working with you this semester!

Sincerely,

Maureen Padden



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING COURSES

PLEASE READ THE FOLLOWING NOTES REFORE COMPLETING THIS FORM:

1. 2. 3.	An ele (Email: A repre	ctronic ve : <i>espiritu</i> esentative	rsion of this @mcmaste from the d	s form i e <i>r.ca</i>). epartm	must be em	ailed t	o th atte	ne As nd th	ssistar he Fac	nt Secretary culty Curricul	and S		ted. em Administrator nmittee meeting durin	g whi	ch th	nis
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1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
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5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PLI	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Naı	me: Stuart PHILLIPS Email: phillis Extension: 24465 Date: January 11, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/Medy/2011



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	nis form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. The electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator									
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OTHER CHANGES		EXPLAIN:								
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5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
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PL	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Na	me: Stuart PHILLIPS Email: phillis Extension: 24465 Date: January 11, 2012

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SGS/Medy/2011



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			urse changes. All sections of this fo							
		n of this form must be emailed to the Assistant Secretary and SynApps System Administrator								
(Email: espiritu@										
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DEPARTMENT/PROC	SRAM	Mathematics	s and Statistics							
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THE OTHER DEPARTMEN	ıт(s). N о <u>т</u>	E: CROSS-LIS	TING OF COURSES REQUIRES WRITTEN	APPROVAL	FROM EACH DEPARTMENT AND FACULTY	•				
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texts to be used.			•	-	•	-				
Same as for 4FM3										

1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
	s course replaces the course 6K03. The change was necessary because of a new undergraduate program in Financial Mathematics, ch led to the restructuring of the course 4K03.
2.	EXPECTED ENROLMENT:
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3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
lect	rures
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, icate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
The	e Extra Work for Graduate students will consist of enriched Assignments, Presentations and Projects
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
No	
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PLI	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

Extension: 27243

Date: 19/01/2012

SGS/Medy/2011



 An electronic vers (Email: espiritu@ A representative fit 									
DEPARTMENT/PROG	BRAM	Mathematics	and Statis	tics					
COURSE TITLE		Topics in Diffe	ential Equa	ations					
COURSE NUMBER	6FT3	FULL C	OURSE	()	HALF COU	JRSE C	REDIT (X)	QUARTER (MODUL	E) ()
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OTHER CHANGES	EXPLAIN:								
Calendar. Topics to be selected three lectures; one telegraphs.	BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar. Topics to be selected from the theory of ordinary differential equations, bifurcation and stability, and partial differential equations. Three lectures; one term								
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1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
	s course replaces the course 6G03. The change was necessary because of new undergraduate programs in Financial Mathematics Mathematical Biology, which led to the restructuring of the course 4G03.
2.	EXPECTED ENROLMENT:
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3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
lect	tures
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No	
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PLI	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

Extension: 27243

Date: 19/01/2012

SGS/Medy/2011



	PLEA	SE READ T	HE FOLL	OWING	G NOTE	S BEFORE (COMPLI	ETING THI	S FORM:			
1. This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed.												
	nic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator											
	(Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this											
recommendation for change in graduate curriculum will be discussed.												
DEPARTMENT/PROC	Mathematic	Mathematics and Statistics										
COURSE TITLE	Mathematic	Mathematical Biology										
COURSE NUMBER 6MB3			COURSE CREDIT									
		FULL	FULL COURSE () HALF COURSE (X) QUARTER (MODULE)								()	
INSTRUCTOR(S)	Earn,Wolkow	arn,Wolkowitz										
PREREQUISITE(S)	REQUISITE(S)											
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)												
NEW COURSE X DATE TO BE OFFERED: Was THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? NO IF YES, PROVIDE THE DATE:												
WILL THE COURSE BE C	ROSS-LIST	ED WITH ANO	HER DEP	ARTMEN	NT?				NY RELEVANT CORRESP			
WITH THE OTHER DEPARTMENT(S). NOTE: CROSS-LISTING OF COURSES REQUIRES WRITTEN APPROVAL FROM EACH DEPARTMENT AND FACULTY CONCERNED.												
CHANGE IN PROVIDE THE NEW COURSE TITLE:												
COURSE TITLE												
CHANGE IN COURSE DESCRIPTION		600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								X		
CHANGE TO FULL C		CHANGE TO HALF COURSE COURSE										
	Prov	PROVIDE THE REASON FOR COURSE CANCELLATION:										
COURSE CANCELLATION	COURSE											
	EXPLAIN:											
OTHER CHANGES												
BRIEF DESCRIPTION	N FOR CA	LENDAR -	Provide a	a brief	descrip	tion <i>(maxim</i>	um 6 lir	nes) to be	included in the Grad	ıate		
Calendar.					-	•		•				
Population dynamics: models of discrete and continuous growth; competition and predation; epidemic models. Other topics selected by												
instructor. Three lectures; one term												
THICE ICULATES, OHE LETTH												
CONTENT/RATIONAl texts to be used.	LE - Prov	ide a brief d	escriptio	n, i.e.,	outline	the topics o	r major	sub-topic	s, and indicate the p	rincip	al	
Same as 4MB3												
Carrio do rivido												

1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)							
The new undergraduate program in Mathematical Biology created a course 4MB3. This is an opportunity to offer the course also to Graduate Students.							
2. EXPECTED ENROLMENT:							
5							
3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):							
lectures							
4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course,							
indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)							
IThe Extra Work for Graduate students will consist of enriched Assignments, Presentations and Projects							
5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).							
NO							
6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?							
PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:							
Name: Manfred Kolster Email: kolster@mcmaster.ca Extension: 27243 Date: 19/01/2012							

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.

SGS/Medy/2011



1. This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. 2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.										
DEPARTMENT/PRO	GRAM	Mathematics and Statistics								
COURSE TITLE		Dynamical systems								
COURSE NUMBER	6G03	FULL COURSE () HALF COURSE (X) QUARTER (MODULE) ()								
INSTRUCTOR(S)								, ,		
PREREQUISITE(S)										
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)										
NEW DATE TO BE OFFERED:				Was the Proposed Course Offered on Dean's Approval? If Yes, Provide the Date:						
WILL THE COURSE BE <u>Cross-Listed</u> with Another Department? If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). No <u>te</u> : Cross-Listing of courses requires written approval from <u>each</u> department and faculty concerned.										
CHANGE IN COURSE TITLE										
CHANGE IN COURS DESCRIPTION	E	600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								
CHANGE TO FULL				LF COURSE		CHANGE	TO QUARTER			
COURSE CANCELLATION A PROVIDE THE REASON FOR COURSE CANCELLATION: This course is being replaced by 6FT3										
OTHER CHANGES	EXPLAIN:	EXPLAIN:								
BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.										
CONTENT/RATIONA texts to be used.	LE - Provi	ide a brief de	scriptio	on, i.e., out	line the topics	or majo	or sub-topics	s, and indicate the princi	ρal	

	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, licate the <u>Extra Work</u> to be required of graduate students, i.e., exams, essays, etc.)
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PL	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Na	me: Manfred Kolster Email: kolster@mcmaster.ca Extension: 27243 Date: 19/01/2012



1. This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. 2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.											
DEPARTMENT/PROGRA	AM Math	hematics and Stat	tistics								
COURSE TITLE	Math	hematics of Finance	ce								
COURSE NUMBER 6	6K03	FULL COURSE () HALF COURSE (X) QUARTER (MODULE) ()									
INSTRUCTOR(S)		FOLL COURSE	. ()	HALF COURSE	(^)	WOAKTER (MODULE)					
PREREQUISITE(S)											
	NATURE	OF RECOMME	NDATION (PLEASE CHECK AI	PPROPRIAT	E BOX)					
NEW DATE TO	BE OFFERED		Was the Prop	OSED COURSE OFFER	ED ON DEAN'S	APPROVAL?					
WILL THE COURSE BE CROWITH THE OTHER DEPARTM CONCERNED.	WILL THE COURSE BE <u>Cross-listed</u> with Another Department? If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires written approval from <u>each</u> department and faculty										
CHANGE IN COURSE TITLE	Pro	OVIDE THE NEW C	OURSE TITLE:								
CHANGE IN COURSE DESCRIPTION			00-LEVEL COURSE (Undergraduate course for graduate credit) Please ee #4 on page 2 of this form								
CHANGE TO FULL COL	URSE		E TO HALF C		CHANGE	TO QUARTER					
COURSE CANCELLATION X	PROVIDE THE REASON FOR COURSE CANCELLATION: This course is being replaced by 6FM3										
OTHER CHANGES	PLAIN:										
BRIEF DESCRIPTION F Calendar.	BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.										
CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.											

	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
2.	EXPECTED ENROLMENT:
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, licate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
PL	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Na	me: Manfred Kolster Email: Kolster@mcmaster.ca Extension: 27243 Date: 19/01/2012



PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:									
 This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator 									
	(Email: espiritu@mcmaster.ca).								
3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this									
recommendation for change in graduate curriculum will be discussed.									
DEPARTMENT/PROGRAM MSc (STATISTICS)									
COURSE TITLE	Nor	parametric Method	ls in Statistics						
COURSE NUMBER	6U03 FU	COULL COURSE () HALF COUF	RSE CREDIT RSE () QUARTER (MODULE) ()						
INSTRUCTOR(S)									
PREREQUISITE(S)									
	NATURE OF I	RECOMMENDATION (PLEASE CHE							
NEW DATE TO	BE OFFERED:	If Yes, Provide the Date:							
WILL THE COURSE BE CROSS-LISTED WITH ANOTHER DEPARTMENT? IF YES, ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S). Note: Cross-Listing of courses requires written approval from Each DEPARTMENT AND FACULTY CONCERNED.									
CHANGE IN COURSE TITLE	Provide	THE NEW COURSE TITLE:	Course Title:						
CHANGE IN COURSE DESCRIPTION		600-LEVEL COURSE (Undergradu see #4 on page 2 of this form	rate course for graduate credit) Please						
CHANGE TO FULL COU		CHANGE TO HALF COURSE	CHANGE TO QUARTER COURSE						
COURSE CANCELLATION	There was	ason for Course Cancellation: & a. course State 4003 & 6003 for graduate st	some years ago, and this was						
CHARGEO		ed some years ago, but							
BRIEF DESCRIPTION FO	BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.								
CONTENT/RATIONALE texts to be used.	- Provide a brief	f description, i.e., outline the topics or	major sub-topics, and indicate the principal						

	1. STATEMENT OF PURPOSE (How does the course fit into the department's program?)
	2. EXPECTED ENROLMENT:
	3. DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
- 1	4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
	5. TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
	6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
	PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
	N. Balakrishnan balak mcmaster. ca 23420 January 11, 2012 Name: Email: Extension: Date:



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / **PROCEDURES**

											TING THIS FOR			
	<u>must</u> be completed. 2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator													
	(Email: espiritu@mcmaster.ca).													
3. À represe	3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which													
this reco	this recommendation for change in graduate curriculum will be discussed.													
DEPARTMENT Medical Physics and Applied Radiation Sciences														
NAME OF PROGRAM Radiation So				cience	s (Me	edical	Phys	sics)						
PROGRAM DEGREE	Ph.D. ()	M.A. (()	M.A.Sc.		c.	M.B.A. ()	M. En		M.Sc. (X)	Diploma Program ()	Other (Specify)	
	NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
CHANGE IN REQUIREME		N			_	CHANGE IN COMPREHENSIVE CHANGE IN COURSE EXAMINATION PROCEDURE REQUIREMENTS								Х
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR														
OTHER CHANGES	EXPL	AIN:				•								
DESCRIBE T	HE EXIST	ING	REQUIR	EMEN	IT/PR	OCE	DUR	E:						
	DESCRIBE THE EXISTING REQUIREMENT/PROCEDURE: Students entering the program are required to take Medical Physics 6U03. This course covers Radiation Biology and is a core topic in the program. Students who have taken Medical Physics 4U03 during their undergraduate career are not required to repeat this course.													
PROVIDE A sufficient.)	DETAILED	DES	SCRIPTI	ON OI	THE	REC	COMI	MENDED CHAI	NGE (Atta	ch ac	dditional pages	s if space is no	ot	

Students will be required to take Medical Physics 773 to satisfy the Radiation Biology content of the program rather than Medical Physics *6U03. The program change will consist of replacing Medical Physics 6U03 with Medical Physics *773. For the next one or two years there will still be students who have taken Medical Physics 4U03, and they will not be required to take Medical Physics

Recent changes to the undergraduate program have changed Medical Physics *4U03/*6U03 to Medical Physics *4U03. Since Medical Physics *773 covers the same material as the Medical Physics *6U03 but is delivered at a higher level it is more appropriate that graduate students take the 700 level course that the 600 level course. This also allows Medical Physics *4U03 to be delivered exclusively as an upper level undergraduate course and may appeal to a wider group of students..

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

September 2012

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

No

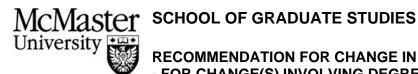
PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:

The M.Sc. in Radiation Sciences (Medical Physics) requires that a candidate complete satisfactorily the courses Medical Physics *775, Medical Physics *773 and one other half course at the 700-level. Students who have not satisfactorily completed Medical Physics *6R03 must also complete this course satisfactorily. Candidates for this M.Sc. are also required to present and defend a thesis, which shall embody the results of original research.

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Tom Farrell Email: tom.farrell@jcc.hhsc.ca Extension: 67014 Date: Jan 6, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.



Physics 773.

RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / **PROCEDURES**

	PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM:												
	must be completed.												
	(Email: espiritu@mcmaster.ca).												
	3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which												
this reco	this recommendation for change in graduate curriculum will be discussed.												
DEPARTMENT Medical Physics and Applied Radiation Sciences													
NAME OF PROGRAM Radiation So					ences (Radiation Biology)								
											Dinlows	Othe	r
PROGRAM	Dh D /	, ,		, ,	M.A.Sc.		M.B.A.	M. Eng.			Diploma (Spe	(Speci	fy)
DEGREE	Ph.D. (,	M.A. (,)	(()	()	()		M.Sc. (X)	()		
											()		
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
CHANGE IN	ADMISSIC	DN			СНА	NGE IN	N COMPREHENS	SIVE	CHANGE IN COURSE				
REQUIREME	ENTS				EXA	MINAT	ION PROCEDUR	RE		REQUIREMENTS			Х
	CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR EXPLAIN:												
	EXPL	AIN:	•			i							
OTHER		_,	•										
CHANGES													
DECORIDE 3	THE EVICE	1110	DEALUD		IT/DD	2050	IDE:						
DESCRIBE 1	HE EXIST	ING	KEQUIK	EWEN	II/PR	JCEDU	IKE:						
							cal Physics 6U03 s 4U03 during th						ic
PROVIDE A	DETAIL ET	DES	CRIPTI		FTHE	RECO	MMENDED CHA	NGF (Atta	ch ar	dditional nage	s if snace is no	<i>t</i>	
sufficient.)	PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (Attach additional pages if space is not sufficient.)												
Students will	be require	d to ta	ake Med	ical Pł	nysics	773 to s	satisfy the Radiat	ion Biology	/ cont	ent of the progi	ram rather than	Medical	

Physics *6U03. The program change will consist of replacing Medical Physics 6U03 with Medical Physics *773. For the next one or two years there will still be students who have taken Medical Physics 4U03/6U03, and they will not be required to take Medical

Recent changes to the undergraduate program have changed Medical Physics *4U03/*6U03 to Medical Physics *4U03. Since Medical Physics *773 covers the same material as the Medical Physics *6U03 but is delivered at a higher level it is more appropriate that graduate students take the 700 level course that the 600 level course. This also allows Medical Physics *4U03 to be delivered exclusively as an upper level undergraduate course and may appeal to a wider group of students..

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

September 2012

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

No

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:

The M.Sc. in Radiation Sciences (Radiation Biology) requires that a candidate complete satisfactorily the course Medical Physics *773, and one other half course at the 700 level with can be either Medical Physics *779 or Medical Physics *780. Students who have not satisfactorily completed Medical Physics *6B03 must also complete this course satisfactorily. Candidates for this M.Sc. are also required to present and defend a thesis, which shall embody the results of original research.

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Tom Farrell Email: tom.farrell@jcc.hhsc.ca Extension: 67014 Date: Jan 6, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / **PROCEDURES**

										TING THIS FOR			
	· · · · · · · · · · · · · · · · · · ·												
	<u>must</u> be completed.												
	· · · · · · · · · · · · · · · · · · ·												
	(Email: espiritu@mcmaster.ca).												
this reco	mmendati	on for	change	in gra	duate	curricul	um will be discu	ıssed.					
DEPARTMENT Medical Physics and Applied Radiation Sciences													
NAME OF PROGRAM		He	alth and F	Radiat	ion P	hysics							
PROGRAM DEGREE	Ph.D. ()	M.A. ()	N	I.A.Sc. ()	M.B.A. ()	N	/l. Eng. ()	M.Sc. (X)	Diploma Program ()	ogram (Specify	
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)													
CHANGE IN ADMISSION REQUIREMENTS							OMPREHEN			CHANGE IN COURSE REQUIREMENTS			Х
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR EXPLAIN:													
OTHER CHANGES	EXP	LAIN	:										
DESCRIBE	THE EXIST	<u> </u>	REQUIR	EMEN	IT/PR	OCEDU	RE:						
										vers Radiation l te career are no			ic
PROVIDE A	DETAILE	D DE	SCRIPTION	ON OI	THE	RECO	MMENDED CH	ANGE	(Attach ad	dditional pages	s if space is no	ot	

Students will be required to take Medical Physics 773 to satisfy the Radiation Biology content of the program rather than Medical Physics *6U03. The program change will consist of replacing Medical Physics 6U03 with Medical Physics *773. For the next one or two years there will still be students who have taken Medical Physics 4U03/6U03, and they will not be required to take Medical Physics 773.

Recent changes to the undergraduate program have changed Medical Physics *4U03/*6U03 to Medical Physics *4U03. Since Medical Physics *773 covers the same material as the Medical Physics *6U03 but is delivered at a higher level it is more appropriate that graduate students take the 700 level course that the 600 level course. This also allows Medical Physics *4U03 to be delivered exclusively as an upper level undergraduate course and may appeal to a wider group of students..

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

September 2012

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

No

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:

Complete satisfactorily the courses: Medical Physics *772, Medical Physics *773, Medical Physics *775, and Medical Physics *776. Students must complete satisfactorily one additional *700-level course from the following list: Medical Physics *770, Medical Physics *771 or Medical Physics *778. Students who have not satisfactorily completed Medical Physics *6R03 must also complete this course satisfactorily.

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Tom Farrell Email: tom.farrell@jcc.hhsc.ca Extension: 67014 Date: Jan 6, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.



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DEPARTMENT/PROGRA	M Medi	ical Physics and	d Applied Radia	tion Sciences							
COURSE TITLE	Radi	iation Biology	ation Biology								
COURSE NUMBER *6	SU03	COURSE CREDIT FULL COURSE () HALF COURSE (x) QUARTER (MODULE) ()									
INSTRUCTOR(S)		FOLL COOKS) <u> </u>	HALF COURSE	(*)	WOARTER (MODULE)					
PREREQUISITE(S)											
	NATURE	OF RECOMM	ENDATION	(PLEASE CHECK A	PPROPRIAT	E BOX)					
NEW DATE TO E	BE OFFERED:	:	WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? IF YES, PROVIDE THE DATE:								
WILL THE COURSE BE CROSS WITH THE OTHER DEPARTME CONCERNED.	WILL THE COURSE BE <u>Cross-listed</u> with Another Department? If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). Note: Cross-listing of courses requires written approval from <u>each</u> department and faculty										
CHANGE IN COURSE TITLE	Pro	VIDE THE NEW (Course Title:								
CHANGE IN COURSE DESCRIPTION			D-LEVEL COURSE (Undergraduate course for graduate credit) Please e #4 on page 2 of this form								
CHANGE TO FULL COUP	RSE		GE TO HALF		CHANGE COURSE	TO QUARTER					
COURSE	COURSE PROVIDE THE REASON FOR COURSE CANCELLATION: Medical Physics *773 covers the same material as the Medical Physics *6U03 but is delivered at a higher										
OTHER CHANGES											
BRIEF DESCRIPTION FO Calendar.	BRIEF DESCRIPTION FOR CALENDAR - Provide a brief description (maximum 6 lines) to be included in the Graduate Calendar.										
CONTENT/RATIONALE - Provide a brief description, i.e., outline the topics or major sub-topics, and indicate the principal texts to be used.											

1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)							
2.	EXPECTED ENROLMENT:							
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):							
ind	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, licate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)							
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).							
6.	6. IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?							
PLI	PLEASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:							
Naı	me: Tom Farrell Email: tom.farrell@jcc.hhsc.ca Extension: 67014 Date: Jan 6, 2012							



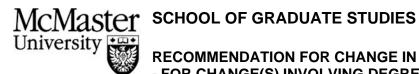
PLEASE READ THE FOLLOWING NOTES BEFORE COMPLETING THIS FORM: 1. This form must be completed for ALL course changes. All sections of this form must be completed. 2. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca). 3. A representative from the department is required to attend the Faculty Curriculum and Policy Committee meeting during which this recommendation for change in graduate curriculum will be discussed.											
DEPARTMENT/PROGRAM Physics and Astronomy											
COURSE TITLE	V	Mathematica	al Introdu	Introduction to Fluid Mechanics							
COURSE NUMBER	#715	FULL	FULL COURSE () HALF COURSE () QUARTER (MODULE) (X)								
INSTRUCTOR(S)			, ,			•					
PREREQUISITE(S)	N/A										
	NATUR	RE OF RE	СОММ	ENDATIO	N (PLEASE	CHECK A	APP	ROPRIA	TE BOX)		
NEW DATE N/A		WAS THE PROPOSED COURSE OFFERED ON DEAN'S APPROVAL? N/A IF YES, PROVIDE THE DATE: N/A									
	WILL THE COURSE BE <u>Cross-listed</u> with Another Department? If Yes, Attach to this Form Any Relevant Correspondence with the Other Department(s). No <u>te</u> : Cross-listing of courses requires written approval from <u>each</u> department and faculty concerned.										
CHANGE IN COURSE TITLE		PROVIDE THE	NEW (Course Titi	E:						
CHANGE IN COURSI	<u> </u>	Х	X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								
CHANGE TO FULL C	OURSE				F COURSE			CHANGE COURSE	TO QUARTER		
COURSE CANCELLATION	Provide	ETHE REASO	N FOR C	OURSE CANO	ELLATION:						
OTHER X		XPLAIN: he only correction to be made is that the descriptions for #715 and #716 need to be swapped. The content in ach description is correct. This change does not affect the calendar entry for Mathematics 749 (cross-reg.)									
BRIEF DESCRIPTION Calendar. Please see above											
CONTENT/RATIONA texts to be used. N/A	LE - Provid	e a brief de	escriptio	on, i.e., out	line the topic	s or majo	or su	ıb-topics	s, and indicate the princ	ipal	

1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)								
N/A									
2.	EXPECTED ENROLMENT:								
N/A									
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):								
N/A									
	4. DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, indicate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)								
N/A									
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).								
N/A									
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?								
N/A									
PLE	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:								
Nar	ne: Alan Chen Email: chenal@mcmaster.ca Extension: 27096 Date: January 18, 2012								



			E FOLLOWING NOTE								
 This form must be completed for <u>ALL</u> course changes. All sections of this form <u>must</u> be completed. An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator 											
 An electronic version of this form must be emailed to the Assistant Secretary and SynApps System Administrator (Email: espiritu@mcmaster.ca). 											
			equired to attend the Fa	aculty Curriculum a	nd Policy Co	mmittee meeting during whi	ch this				
recommendation f	or change i	in graduate o	urriculum will be discu	ssed.							
DEPARTMENT/PROG	BRAM	Physics and Astronomy									
COURSE TITLE		Incompressible Computational Fluid Dynamics									
COURSE NUMBER	#716	COURSE CREDIT									
OOOROL HOMBER	#110	FULL COURSE () HALF COURSE () QUARTER (MODULE) (X)									
INSTRUCTOR(S)	N/A										
PREREQUISITE(S)	N/A										
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)											
NEW DATE N/A	TO BE OFFE	ERED:		Was the Proposed Course Offered on Dean's Approval? N/A If Yes, Provide the Date: N/A							
WILL THE COURSE BE C	ROSS-LISTE	D WITH ANOTH	IER DEPARTMENT?	IF YES, ATTACH TO		Y RELEVANT CORRESPONDE					
	TMENT(S).	Note: Cros	S-LISTING OF COURSES R	EQUIRES WRITTEN AF	PPROVAL FROM	I <u>EACH</u> DEPARTMENT AND FAC	ULTY				
CHANCE IN PROVIDE THE NEW COURSE TITLE:											
CHANGE IN COURSE TITLE		I ROVIDE THE	THE NEW COUNSE THEE.								
CHANGE IN COURSE DESCRIPTION		Х	X 600-LEVEL COURSE (Undergraduate course for graduate credit) Please see #4 on page 2 of this form								
CHANGE TO FULL C	OURSE		CHANGE TO HALF		CHANGE	TO QUARTER					
	Provid	E THE REASO	N FOR COURSE CANCELL	ATION:	o o o i to z						
COURSE CANCELLATION											
	EXPLAIN:										
The only correction to be made is that the descriptions for #715 and #716 need to be swapped. The content											
6		•	<u> </u>			Mathematics 749 (cross-re	g.)				
	FOR CAL	ENDAR - P	rovide a brief descrip	tion <i>(maximum 6</i>	lines) to be i	ncluded in the Graduate					
Calendar. Please see above											
i icase see abuve											
	LE - Provid	de a brief de	scription, i.e., outline	the topics or maj	or sub-topic	s, and indicate the princip	al				
texts to be used.											
N/A											

1.	STATEMENT OF PURPOSE (How does the course fit into the department's program?)
N/A	
2.	EXPECTED ENROLMENT:
N/A	
3.	DESCRIBE IN DETAIL THE METHOD OF PRESENTATION OF COURSE MATERIAL (i.e., lectures, seminars):
N/A	
	DESCRIBE IN DETAIL THE METHOD OF EVALUATION (percentage breakdown, if possible): (For 600-level course, icate the Extra Work to be required of graduate students, i.e., exams, essays, etc.)
N/A	
5.	TO PREVENT OVERLAP, IS A COURSE IN THE SAME OR A RELATED AREA OFFERED IN ANOTHER DEPARTMENT? IF YES, PLEASE ATTACH TO THIS FORM ANY RELEVANT CORRESPONDENCE WITH THE OTHER DEPARTMENT(S).
N/A	
6.	IF THE COURSE IS INTENDED PRIMARILY FOR STUDENTS OUTSIDE YOUR DEPARTMENT, DO YOU HAVE THE SUPPORT OF THE DEPARTMENT/PROGRAM CONCERNED?
N/A	
PLE	EASE PROVIDE THE CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:
Nar	ne: Alan Chen Email: chenal@mcmaster.ca Extension: 27096 Date: January 18, 2012



RECOMMENDATION FOR CHANGE IN GRADUATE CURRICULUM - FOR CHANGE(S) INVOLVING DEGREE PROGRAM REQUIREMENTS / **PROCEDURES**

2. An elect (Email: 3. A repres	com ronic <i>espii</i> enta	pleted version vitu@m tive fro	comp l. on of the om the	leted for this form ster.ca). e depart	ALL of must in ment in	changes i be email s require	nvolvir ed to th d to att	ne Assistant Se	am require cretary and Curriculur	ement d Syn	ts/procedures. Apps System A	All sections of		1
DEPARTMENT Psychology,						oscience	& Beh	aviour						
NAME OF PROGRAM			Psy	chology	, Neur	oscience	science & Behaviour							
PROGRAM DEGREE			()	M.A.Sc.		M.B.A. ()	M. Eng.		M.Sc. ()	Diploma Program ()	Other (Specify)			
NATURE OF RECOMMENDATION (PLEASE CHECK APPROPRIATE BOX)														
CHANGE IN ADMISSION REQUIREMENTS				х	CHANGE IN COMPREHENSIVE EXAMINATION PROCEDURE			CHANGE IN COURSE REQUIREMENTS						
CHANGE IN THE DESCRIPTION OF A SECTION IN THE GRADUATE CALENDAR EXPLAIN:														
OTHER CHANGES	EXPLAIN: Simply delete the sentence in the Graduate Calendar (currently page 553) that states that "Applicants are required to submit the results of the Graduate Record Examination (verbal and quantitative).													
Students are									uantitative) with	n their applicatio	on to the progra	m.	

PROVIDE A DETAILED DESCRIPTION OF THE RECOMMENDED CHANGE (Attach additional pages if space is not sufficient.)

Eliminate the requirement that applicants to our graduate program are required to submit the results of the Graduate Record Examination (verbal and quantitative).

For many years we have required applicants to submit results from the GRE with their application. However, over the past several years a significant number of our faculty (principally those in more biologically oriented areas of psychology) have found that the number of qualified applicants has been dropping steadily. They have noted that they are competing for applicants with many other programs that do not have a GRE requirement, and have indeed first-hand knowledge of having lost potentially good applicants to those programs, at least in part because of the GRE requirement. Although some of our faculty continue to believe that the GRE offers useful information about applicants, all of our faculty felt that retaining it as a firm requirement of all applicants is untenable given the harm it is doing to some research programs.

PROVIDE IMPLEMENTATION DATE: (Implementation date should be at the beginning of the academic year)

Beginning of the academic year, 2012-13

ARE THERE ANY OTHER DETAILS OF THE RECOMMENDED CHANGE THAT THE CURRICULUM AND POLICY COMMITTEE SHOULD BE AWARE OF? IF YES, EXPLAIN.

PROVIDE A DESCRIPTION OF THE RECOMMENDED CHANGE TO BE INCLUDED IN THE CALENDAR:

Simply delete the sentence in the Graduate Calendar (currently page 553) that states that "Applicants are required to submit the results of the Graduate Record Examination (verbal and quantitative).

CONTACT INFORMATION FOR THE RECOMMENDED CHANGE:

Name: Bruce Milliken Email: millike@mcmaster.ca Extension: x24361 Date: January 20, 2012

If you have any questions regarding this form, please contact Medy Espiritu, Assistant Secretary and SynApps System Administrator, School of Graduate Studies, extension 24204.