

## New Course

Proposal Reference Number : 2195  
 PRN Alias : 10-11#234  
 Version No : 5  
 Submitted By : Ms Helen Aaron  
 Edited By : Ms Helen Aaron

[Display Printable PDF](#)

New Data					
Program Affected?	Y				
Program Change Form Submitted?	N (Simple Change) - This course should be placed on the list of complementary courses for the Honours Program in Mathematics, the Honours Program in Applied Mathematics, the Joint Honours Program in Mathematics and Computer Science				
Subject/Course/Term	MATH 553 <ul style="list-style-type: none"> <li>• one term</li> </ul>				
Credit Weight or CEU's	4 credits				
Course Activities	<table border="1"> <thead> <tr> <th>Schedule Type</th> <th>Hours per week</th> </tr> </thead> <tbody> <tr> <td>A - Lecture</td> <td>3</td> </tr> </tbody> </table>	Schedule Type	Hours per week	A - Lecture	3
	Schedule Type	Hours per week			
A - Lecture	3				
Total Hours per Week : 3 Total Number of Weeks : 13					
Course Title	<table border="1"> <tr> <td>Official Course Title :</td> <td>Algorithmic Game Theory</td> </tr> <tr> <td>Course Title in Calendar :</td> <td></td> </tr> </table>	Official Course Title :	Algorithmic Game Theory	Course Title in Calendar :	
	Official Course Title :	Algorithmic Game Theory			
Course Title in Calendar :					
Rationale	<p>Algorithmic game theory is an emerging interdisciplinary field that has profound theoretical and practical interest. No course on this topic is currently offered at McGill; this proposal aims to rectify that. The instructor is jointly appointed by the department of Mathematics and Statistics and the School of Computer Science. This is a double-prefix course with the School of Computer Science (MATH/COMP 553). The course has strong mathematics and computer science components and is aimed at students in both departments. It will also be part of programs in both departments. All MATH 500-level courses have a credit weight of 4. The workload for students in these graduate level courses is considerable; the topics covered are conceptually highly challenging; students are expected to do a substantial amount of independent reading which requires a time commitment that goes well beyond the usual 2 hours per lecture hour that is expected for a 3 credit course.</p>				
Responsible Instructor					
Course Description	Foundations of game theory. Computation aspects of equilibria. Theory of auctions and modern auction design. General equilibrium theory and welfare economics. Algorithmic Mechanism design. Dynamic games.				

Teaching Dept.	0290 : Mathematics and Statistics
Administering Faculty/Unit	SC : Faculty of Science
Prerequisites	COMP 362 or MATH 350 or MATH 354 or MATH 487, or instructor permission. Web Registration Blocked? : N
Corequisites	
Restrictions	Not open to students who are taking or have taken COMP 553.
Supplementary Calendar Info	
Additional Course Charges	
Campus	Downtown
Projected Enrollment	20
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?	
Effective Term of Implementation	201109
File Attachments	No attachments have been saved yet.
To be completed by the Faculty	
For Continuing Education 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								Approved by Department Meeting Edited by: Helen Aaron on: Dec 8 2010
4								Approved by Department Meeting Edited by: Helen Aaron on: Dec 7 2010
3								Approved by Department Meeting Edited by: Helen Aaron on: Dec 7 2010
2								Approved by Department Meeting Edited by: Helen Aaron on: Nov 30 2010
1		Approved Axel W Hundemer Meeting Date: Apr 12 2010 Approval Date: Oct 28 2010 <a href="#">View Comments</a>						Approved by Department Meeting Created on: Oct 18 2010