Retirement and Replacements

This is Professor Abe Igelfeld's final semester in his current position. His retirement, results in need for individuals to fill the roles of:

- Transfer Credit Assessment liaison with the Transfer Credit Office – Alfonso Gracia-Saz?
- Department Representative on Scholarship review panels and the Department liaison with the Faculty of Arts and Science – Alfonso Gracia-Saz?
- Manager, Teaching Assistants Positions – Jason Siefken?
- Instructor and Coordinator – MAT133Y1 – (??)

Learning Management System

A new Learning Management System QUERCUS, replaces Portal/Blackboard, at the start of the next academic year, 2018-2019. Faculty, staff and all instructors are encouraged to:

- Attend training sessions
- Export old data from Portal/Blackboard to Quercus
- Back up old data from Portal/Blackboard on secured Math Department directories

We are requesting for two volunteers who will choose to be trained, and act as resource personnel during this learning curve.
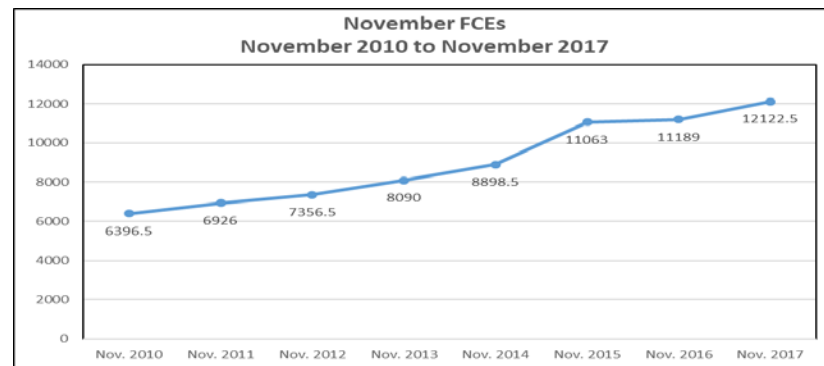
New Courses

The following new courses were offered, this academic year 2017-2018.

- Mathematical Method in Data Science, MAT245H1, taught by Professor Nicholas Hoell, closed with 18 students
- Number Theory for Specialist Students, MAT382H1 taught by Professor Jacob Tsimerman closed with 8 students
- Mathematical Modelling, MAT482H1 taught by Professor Adam Stinchombe closed with 15 students

Increasing FCEs

The amount of full course equivalents taught by the Department of Mathematics continues to increase.

Total Math FCEs offered from November 2010 to November 2017								
	Nov. 2010	Nov. 2011	Nov. 2012	Nov. 2013	Nov. 2014	Nov. 2015	Nov. 2016	Nov. 2017
MAT	5997.5	6470.5	6904.5	7627	8403	10534.5	10718.5	11507
APM	227.5	298	263	299	352.5	409.5	445	590.5
JMB	119	97	107	94	77	83	0	0
JUM	9.5	16.5	22.5	26	23	15	19	0
PMU	43	44	59.5	44	43	21	25.5	25
Yearly Total	6396.5	6926	7356.5	8090	8898.5	11063	11189	12122.5

November FCEs November 2010 to November 2017

NSERC Awards

The Department received seven awards for Summer 2018. The details are displayed in the table below:

NSERC SUMMER 2018		
Student Last Name	Student First Name	Supervisor
Chow	Michael	Bierstone, Edward
Hofmann	Jordan	Rafi, Kasra
Khesin	Andrey	Alexakis, Spyridon
Ledvinka	David	Bar Natan, Dror
Morton-Ferguson	Calder	Kamnitzer, Joel
Nackan	Daniel	Meinrenken, Eckhard
Wu	Matthew	Murnaghan, Fiona

Work Study Opportunity

Initiated by Professor Kasra Rafi, with the Chairs, approval, request was made for four Math Research Intern Workstudy positions for Summer 2018. All four positions were approved.

Undergraduate Math Competition

The University of Toronto, Undergraduate Mathematics Competition was held on Saturday, March 10, 2018. As a result of Professor Barbeau's dedicated commitment, this annual event convened for the 18th year. Students wrote the competition at two locations, St. George and at the UTSC campuses. The top three students listed in ranking order are:

1. Michael Chow (IV Math)
2. Itai Bar-Natan (IV Math)

3. Andrew Gomes (IV Math/Phys)

****

I Honorable Mention (listed in alphabetical order)
- Andrey Khesin (III Math/Phys)
- Jianing Li (II EngSci)
- Dmitry Paramonov (III CSc)

****

II Honorable Mention (listed in alphabetical order)
- Rafael Aznar (III Math)
- Lian Patinaan (UTSC)
- Richard Chow (II AppMat)
- Xincheng Zhang (UTSC)

PUTNAM Math Competition

The persistent hard work of the students and their supervisors, Professor Bernardo Galvao-Sousa and Professor Alfonso Gracia-Saz resulted in the achievement of fourth place in the Seventy-Eighth William PUTNAM competition.

The rankings were:

1. Massachusetts Institute of Technology
2. Harvard University
3. Princeton University
4. University of Toronto
5. University of California at Los Angeles

Performance in First Year Courses

The following charts data provides an update on the performance of in the selected first year math courses. The average and median indicators show similar amounts across the courses. Appendix II provides a detailed look at the average and median scores in the first year courses for the past five years.

Comparison of Original Marks Distribution 2017 Fall in relation to 2016 Fall					
	Fall 2017			**Fall 2016**	
Course	Average	Median		Average	Median
MAT135H1F	67.1%	70.0%		72.9%	77.0%
MAT136H1F	61.8%	68.0%		50.2%	53.0%
MAT221H1F	65.7%	70.0%		67.9%	67.0%
MAT223H1F	67.3%	68.0%		66.6%	68.0%
MAT224H1F	65.9%	70.0%		68.1%	70.0%
MAT240H1F	63.1%	66.0%		66.8%	69.0%

Please note that although the class sizes show reduction in numbers between the Fall and 2016 and Fall 2017 enrolment continues to increase. These reductions account for the number of students who actually ends the courses. Therefore, in Fall 2017 we had fewer students completing MAT136, MAT223 and MAT224 than we had in the same period in the previous year. Appendix III displays additional marks distribution tables for the last five years.

This semester, the number of students who have dropped from many of the mathematics courses reached a record high in some courses. We have asked the faculty for the data on the changes in enrolment from the start to the end of the courses for several years so that we will be able to identify trends.

Original Marks Distribution - Fall 2017						
Course	Class Size	A total	B Total	C Total	D Total	F
MAT135H1F	2428	25.5%	24.9%	21.9%	15.1%	12.5%
MAT136H1F	144	39.4%	7.9%	10.2%	7.9%	34.6%
MAT221H1F	66	25.8%	25.8%	16.7%	13.6%	18.2%
MAT223H1F	1269	28.3%	20.5%	21.3%	15.5%	14.4%
MAT224H1F	228	25.4%	25.0%	18.8%	17.4%	13.4%
MAT240H1F	161	29.4%	15.0%	15.0%	16.2%	23.8%

Original Marks Distribution - Fall 2016						
Course	Class Size	A	B	C	D	F
MAT135H1F	2352	43.5%	30.5%	13.5%	6.7%	5.8%
MAT136H1F	188	7.7%	13.5%	18.6%	25.6%	34.6%
MAT221H1F	63	25.0%	20.0%	30.0%	18.3%	6.7%
MAT223H1F	1384	27.5%	21.8%	21.4%	12.2%	17.1%
MAT224H1F	375	30.2%	23.1%	22.3%	13.0%	11.4%
MAT240H1F	156	30.5%	18.8%	19.5%	13.6%	17.5%

Comparison of Course Data - Fall 2017 in relation to Fall 2016						
Course	Class Size	A total	B Total	C Total	D Total	F
MAT135H1F	76	-18.0%	-5.60%	8.40%	8.40%	6.70%
MAT136H1F	-44	31.7%	-5.60%	-8.40%	-17.70%	0.00%
MAT221H1F	3	0.8%	5.80%	-13.30%	-4.70%	11.50%
MAT223H1F	-115	0.8%	-1.30%	-0.10%	3.30%	-2.70%
MAT224H1F	-147	-4.8%	1.90%	-3.50%	4.40%	2.00%
MAT240H1F	5	-1.1%	-3.80%	-4.50%	2.60%	6.30%

Undergraduate Student Development Activities

Mentorship

- The 2017-2018 undergraduate mentorship program included the following activities:
  - Mentee Launch event, October 2017
  - MentorConnect Event, January 2018
  - MentorshipMarch, March 2018 – During this month mentors invited their student mentees into their work environment for practice interviews and feedback on their résumé
  - Closing Activity, May 2018

Academic Integrity Session

- Officers from the Office of Student Academic Integrity conducted two information sessions for undergraduate students during the fall term.

Backpack to Briefcase (B2B)

- The Department of Mathematics partnered with the Faculty of Arts and Sciences in executing the b2B dinner at the Faculty Club in February 2018

Career in Maths Event

- Math at Work presentation, executed by Carlo Lisi, Senior Audit Manager, Analytics (TD Bank)
- Careers in Math facilitated by Wei Huang, U of T, Career Centre Educator

Graduate School Application

- One graduate school application event was held in each semester. They were facilitated by Professor Burchard, Professor Kim, Professor Rotman and Professor Bar-Natan.

Orientation – Summer 2018

- Thank you once again to the instructors and professors who participated in the Summer 2017 Orientation session.

  Participating instructors:

  - Professor Sarah Mayes-Tang - MAT135H1
  - Professor Alfonso Gracia-Saz – MAT137Y1
  - Professor Joe Repka – MAT157Y1
  - Professor Nicholas Hoell – MAT223H1

- Volunteers are need for the upcoming Summer 2018 orientation to first-year mathematics sessions in August.

  Note:
  In the interest of saving paper the following Appendixes were removed, but this data may be forwarded upon requests.

  1. Appendix I – Feedback Report Summer 2017 Orientation
  2. Appendix II–Marks distribution first year courses (5 years)
  3. Appendix III – Mean and averages in first year courses (5 Years)