

Examining Examinations: Would your institution get an A+?

ARUCC 2010

University of Toronto Mississauga, Office of the Registrar

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Overview

- Who we are and what we do
- Our need for changes
 - Final exam scheduling
 - Supervision and fairness
 - Recording of student attendance
 - Deferred exam scheduling
- Impact of changes
- Future plans



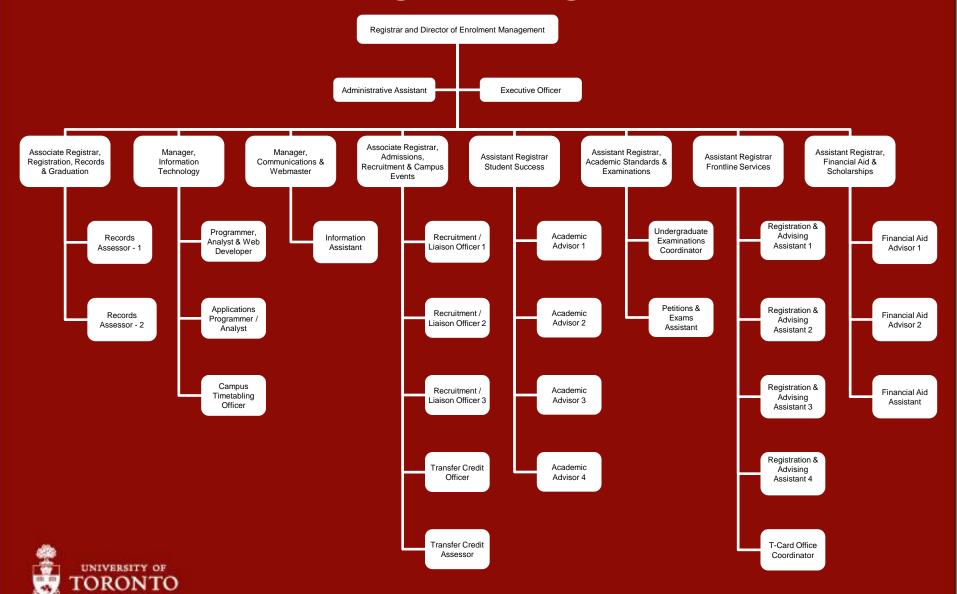
- Established in 1967, UTM is UofT's second largest division – home to 11,000 undergraduate students, over 400 graduate students, and 700 faculty and staff
- 33 km west of the St. George campus, situated along the Credit River on 225 acres of protected green belt
- HBA, HBSc, BCom, BBA, BEd, MA, MSc, MBioTech, MMPA, MMI, MScBMC, DIFA, PhD







Office of the Registrar Organization Chart



Information Technology Team

 Offers IT services and support for the Office of the Registrar. Develops and maintains all the Registrarial WEB applications for students, staff and faculty at UTM related to student records

 Supports and manages all hardware and software used by all staff at the Office of the Registrar



Petitions & Examinations Team

- Administers all final exam periods (April, June, August and December) and all special deferred exam periods (April/May, June/July, August, Reading Week in February) and offers Outside Examination Centre service to non-U of T students
- Assesses and processes between 3,000-4,000 petition requests annually (deferred exams, late withdrawal without academic penalty, suspension lifts, extensions of time for term work, late enrolment, exception to degree requirements)



Final exam scheduling

- Exams Coordinator works with Campus Timetabling Officer to produce a conflict free schedule that promotes student success
- Growing problems:
 - Increase in enrolment
 - Shortage of suitable space
 - Longer exam periods extending well into May
- Solution (beginning in December 2005):
 - 8-10/11 am, 12-2/3 pm, 4-6/7 pm, 8-10 pm, Monday to Saturday



Supervision and fairness

- Instructor led examinations with UTM exam policy and procedures as guideline
- Growing problems:
 - Unequal application of rules and regulations between exam rooms
 - Inconsistent announcements
 - Signature lists not accurate
 - Often understaffed
 - Academic offences left undisciplined
- Solution (beginning in December 2005):
 - Chief Presiding Officers



Recording of student attendance

	Course	Lecture	Student #	Surname	Given name	Signature
1	ANT102H5	L6001	99000000	Banner	David	
2	ANT102H5	L6001	99000001	Blaze	Johnny	
3	ANT102H5	L6001	99000002	Grimm	Ben	
4	ANT102H5	L6001	99000003	Kent	Clark	
5	ANT102H5	L6001	99000004	Parker	Peter	
6	ANT102H5	L6001	99000005	Richards	Reed	
7	ANT102H5	L6001	99000006	Stark	Tony	
8	ANT102H5	L6001	99000007	Storm	Johnny	
9	ANT102H5	L6001	99000008	Wayne	Bruce	



Why it no longer worked for us

- Campus "Grow Smart, Grow Green" philosophy
- Office of the Registrar "Paperless Office"
- SATS and the petitions module
- Freedom of Information and Protection of Privacy Act (FIPPA)



Freedom of Information and Protection of Privacy Act (FIPPA)

- June 2006, Ontario universities were now covered by the Act, which supports access to University records and protection of privacy
 - To provide the public a right of access to university information subject to limited exemptions; and
 - To protect the privacy of individuals with respect to personal information about themselves held by universities and to provide individuals with a right of access to that information



Temporary Fix

 Individual signature sheets attached to exam paper

Master class list for attendance



Temporary exam signature sheets



August 2007 Final Exam Signature Sheet

Student: Please complete this form at the beginning of the exam, tear it away from the exam paper and place it beside your student card on the desk. DO NOT SIGN THE FORM UNTIL IT IS COLLECTED FROM YOU. Thank you.

PRINT Last Name	Course					
PRINT First Name	Section					
Student Number	Instructor					
Signature						
(SIGN ONLY AT TIME OF COLLECTION)						



Temporary attendance checklists

	COURSE	TERM	PERSON ID	SURNAME	GIVEN NAME(S)
1	ANT102H5	F	99000000	Banner	David
2	ANT102H5	F	99000001	Blaze	Johnny
3	ANT102H5	F	99000002	Grimm	Ben
4	ANT102H5	F	99000003	Kent	Clark
5	ANT102H5	F	99000004	Parker	Peter
6	ANT102H5	F	99000005	Richards	Reed
7	ANT102H5	F	99000006	Stark	Tony
8	ANT102H5	F	99000007	Storm	Johnny
9	ANT102H5	F	99000008	Wayne	Bruce



Results

- More paper over 30,000 half sheets for April exam period alone
- Increased time to take attendance at exams
- Increased time to cross reference and check individual sheets against master attendance list
- Although more efficient to check master attendance list for petition decisions, overall a very inefficient process



Permanent Fix Criteria

- Electronic
- Portable
- Sophisticated
- Synchronized
- Secure
- Low cost
- FIPPA compliant
- Pilot in August 2007 and run full version in December 2007



Software - Buy versus Build

- Price
- Time
- Resources
- Flexibility
- Price



The Solution

- Samsung tablet PC unit weighing 1.52 lbs.
- Application developed in PHP with a MySQL database back end
- Attendance data synchronized with main database server after each exam time slot which then populates SATS
- AES encryption
- In-house application allows ability to change and add functionalities as needed
- 10 units at \$1325 each



Logging in

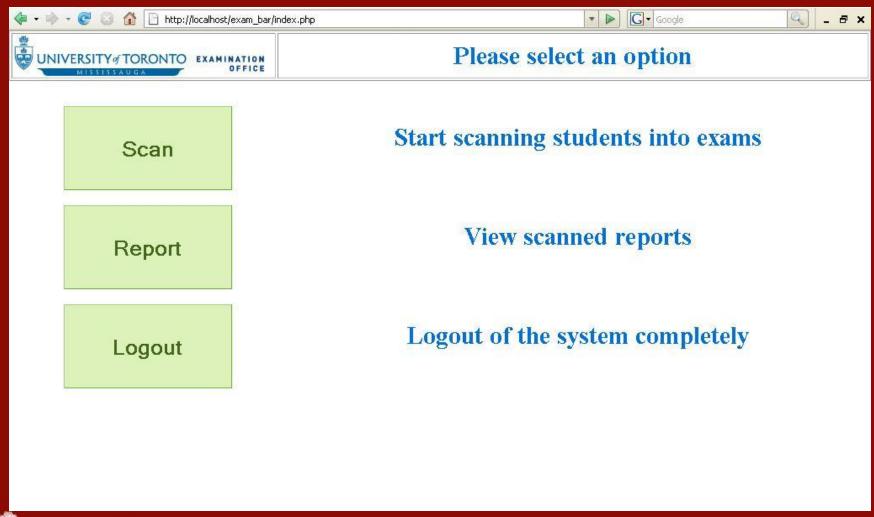




- Turn on the unit
- Enter the hard drive password
- Scan key barcode (on back of CPO nametag)
- Scan CPO's T-card
- After 5 failed attempts, lock-down mode



Main Menu





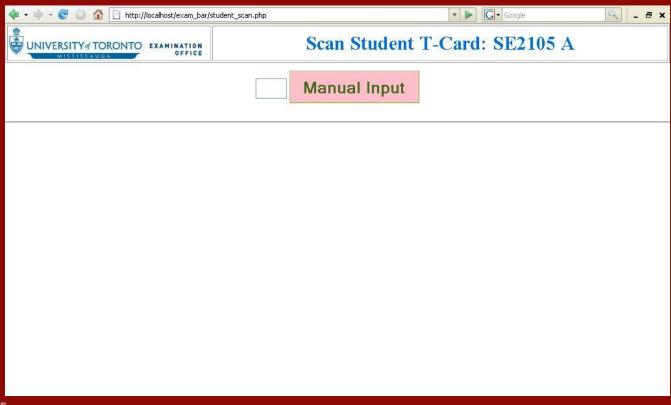
Scan Menu

- More than one examinar in a room is possible therefore Chief
 Presiding Officers select a room, not an exam
- Menu shows only the exam rooms in use during the specific exam time at log in





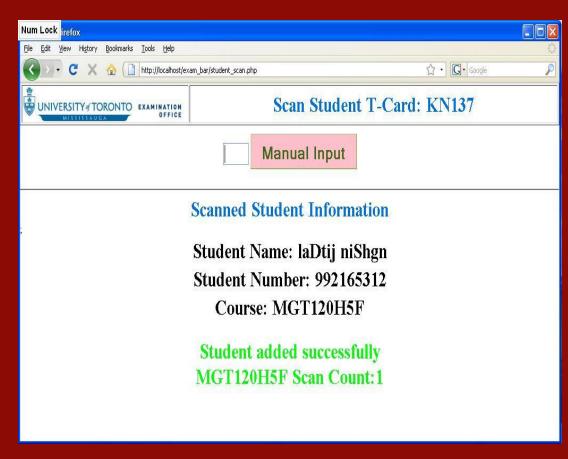
- CPO compares student T-card ID photo to student writing exam and then scans the barcode
- If student has forgotten T-card, CPO enters student ID number manually





Upon a successful scan, SEAT displays...

- Student name
- Student number
- Exam attended
- "Student added successfully" message



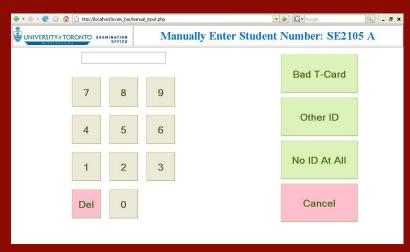


Upon a successful scan, SEAT displays...





Manual input option

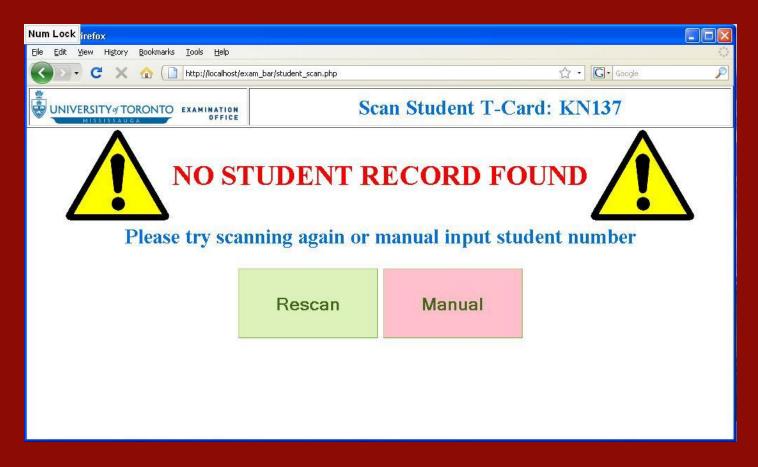




- Enter 9 digit student ID number using number key pad
- A reason for the manual entry is selected
- If 'other ID' selected, list of options appears and type of ID used is entered

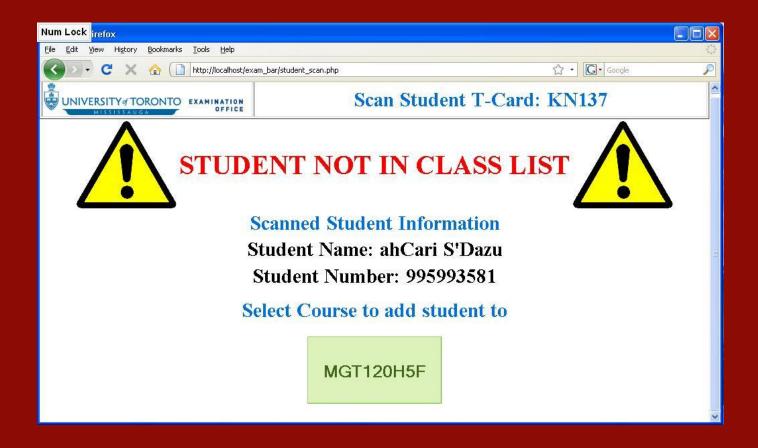


Errors with student attendance input



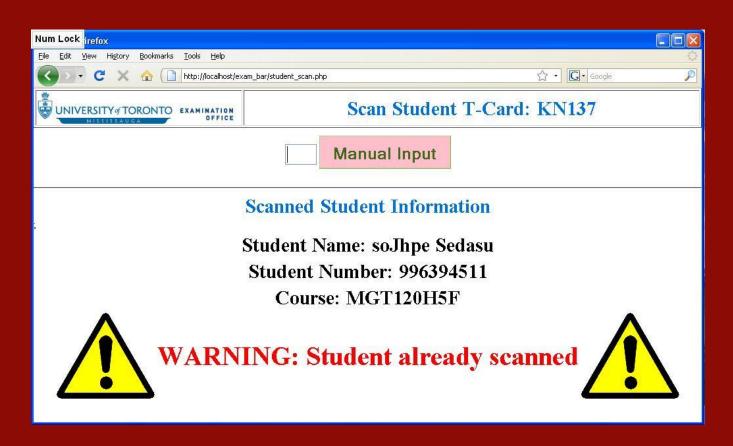


Errors with student attendance input continued



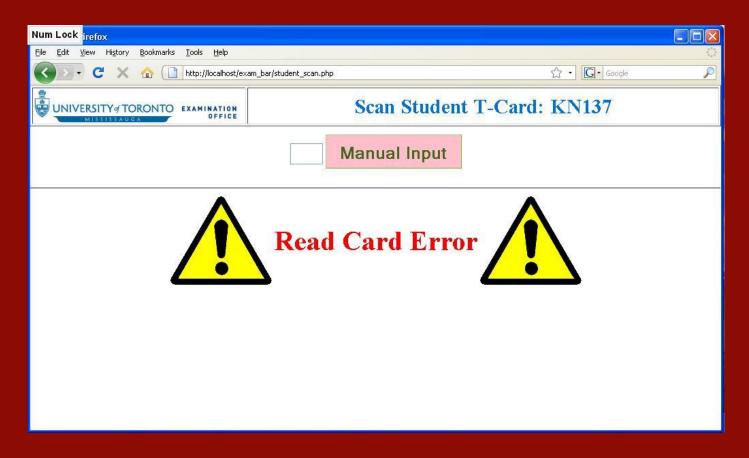


Errors with student attendance input continued



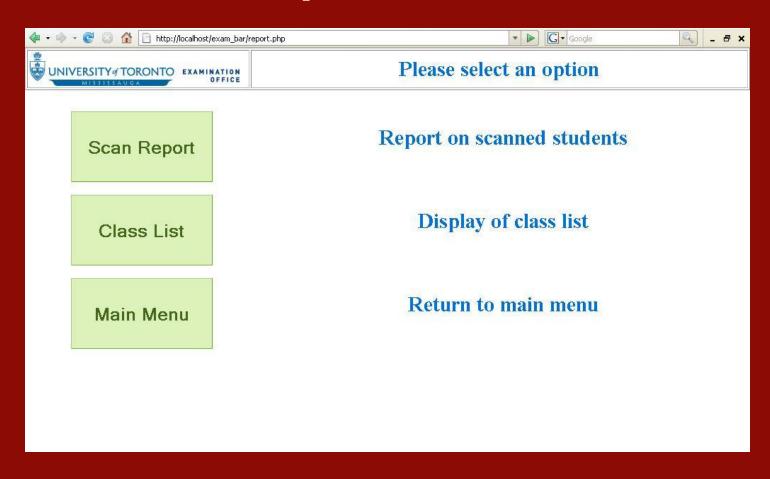


Errors with student attendance input continued



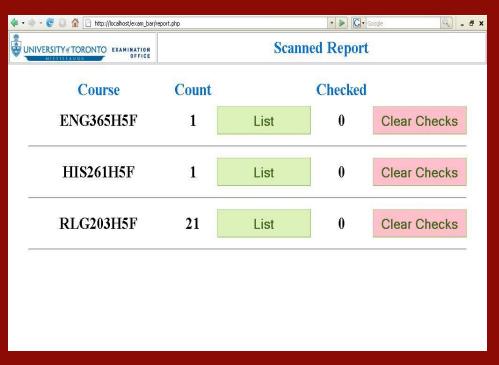


Report Menu





Scan Report Menu

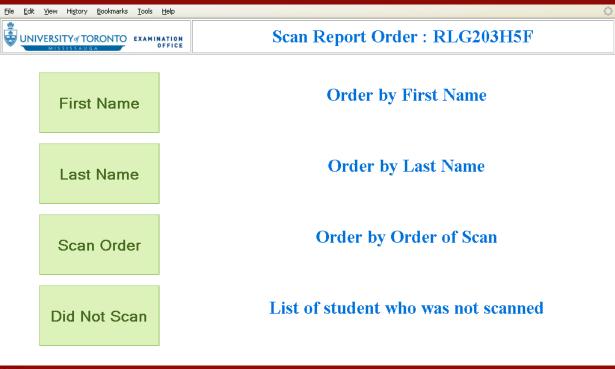


- Lists courses scanned in current exam time slot
- Displays number of students scanned
- Displays number of students checked



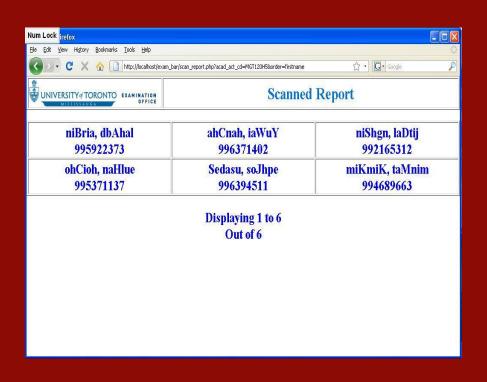
After selecting course...

- Select order you wish the scan list to be in
- Or select "did not scan" for a list of students who were not scanned





List of students scanned



- An interactive report
- Clicking on name marks it in red and indicates that the student has been "checked"
- Feature used to cross check exam papers with students scanned
- If CPO wishes to clear the checked off students, can return to Scan Menu and select "clear checks"



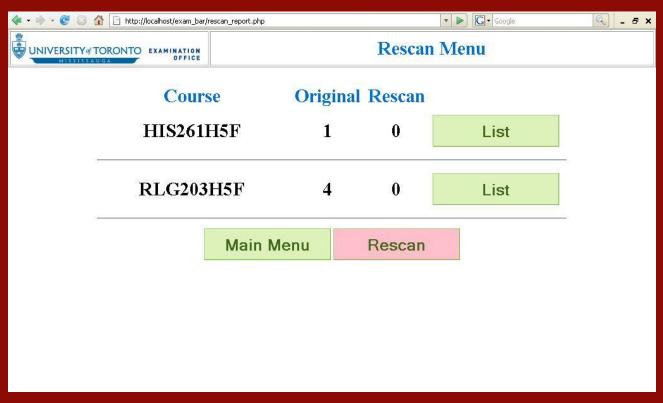
Class List Menu



- Last known class list
- Updated daily from our Student Information system
- Will only lists course exams being written during that time period



Rescan Menu



- Provides student count in original scan and count in rescan
- Click on re-scan to initialize second scan



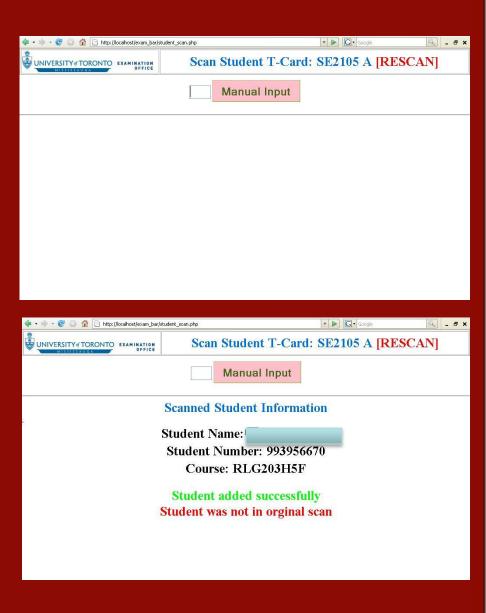




 SEAT will ask user to confirm that they want to re-scan and bring them to the room select screen



- Same procedure as first scan but "rescan" is noted in title bar
- SEAT will note in red if student was not in original scan
- Exit by clicking on logo in upper left







- Brings user back to rescan menu and original scan and rescan numbers are compared
- Click on "list" to get a detailed report of the difference between scans



- Report lists who was not scanned in rescan and who was not scanned in the original scan
- Perfect match shown on screen as "All students accounted for" and "No new student scanned"







SEAT Results

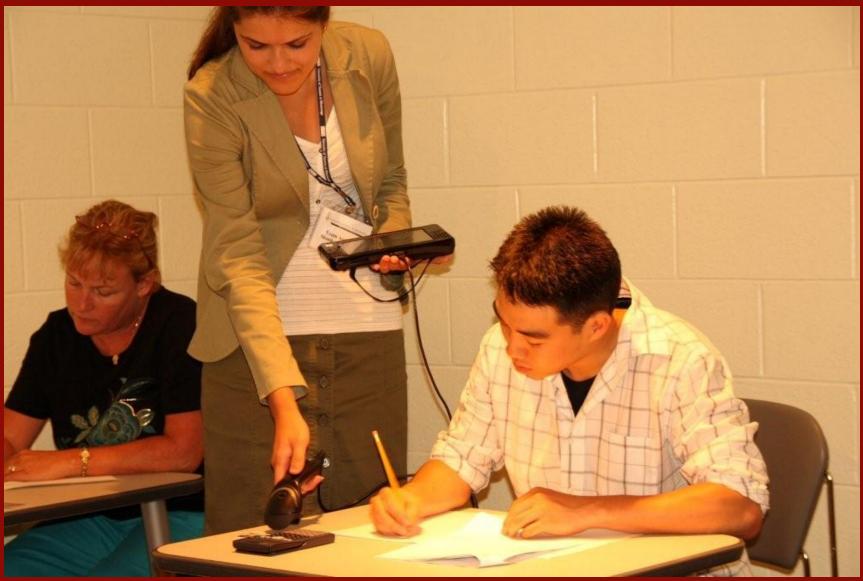
- Allows us to
 - Identify a student
 - Scan a student T-card
 - Ensure student is registered in course
 - Determine if student is sitting correct exam
- Ability to add student to exam attendance file if not currently registered (e.g., if they are sitting a deferred exam from a previous session)
- Can scan students writing in alternate locations (AccessAbility, Conflict Room, Outside Centre)



SEAT Results continued

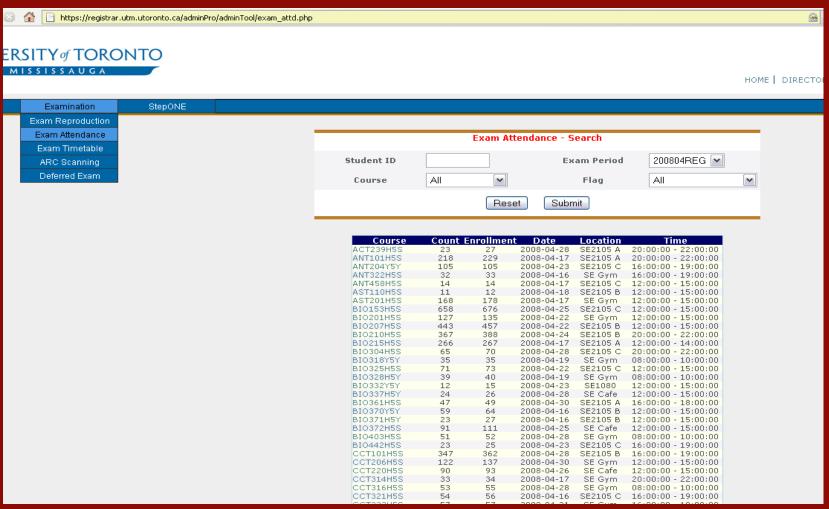
- Provides highly accurate exam attendance records
- Integrates with SATS
- Reduced costs (paper and time)
- FIPPA-rific!!!
- Petitions staff have now doubled their efficiency
- Reduces complexity, logistics, disruption, and time required to take attendance during exams







Exam attendance in SATS





By course

Exam Attendance - Search						
Student ID		Exam Period	200804REG 💌			
Course	All 💌	Flag	All			
	List F	Reset Submit				

Attendance List for BIO153H5 Count: 658

Stude	nt ID Name	Barcode	Course	Room	Period	Scan Time	Exam Time	СРО	Flag
9953		2176101088864400	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:44:06	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9954		2176101087666402	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:47:34	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9960		2176101114842800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:47:30	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9960		2176101106056500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:48:51	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9962		2176101112668900	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:53:57	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9957		2176101126621200	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:43:24	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9963		2176101126890300	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:47:25	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9960		2176101113127500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:41:45	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9947		2176101060898400	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:42:55	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9961		2176101126354000	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:45:39	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9961		2176101113162200	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:51:10	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9961		2176101128529500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:38:55	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9961		2176101117065300	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:48:05	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9960		2176101118042100	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:48:07	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9962		2176101127855500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:40:23	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	Health Card
9954		2176101107306300	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:52:27			
9959		2176101117848200	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:53:05			
9940		2176101035077700	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:51:12	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9957		2176101085815900	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:38:00	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9960		2176101120590500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:44:47	2008-04-25 12:00:00 - 15:00:00	Jessica Sara	
9960		2176101116884800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:50:42			
9963		2176101121603500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:49:31	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
9959		2176101117972000	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:39:54		Jaime Kristen	
9958		2176101128791100	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:47:48		Jaime Kristen	
9938		2176101034032300	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:42:37			
9961		2176101108737800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:46:41	2008-04-25 12:00:00 - 15:00:00		
9961		2176101123635500	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:46:36			
9961		2176101120471800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:51:28			
9959		2176101115539900	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:42:34			Driver's Licence
9961		2176101122328800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:45:37			
9964		2176101123813800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:42:52	2008-04-25 12:00:00 - 15:00:00		
9951		2176101116457300	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:45:51	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	



By Student ID

	Student Details General Notes Seminars Exam Repro eCabinet Documents Walkin Advising Petitions(0) CGPA Tool						
	Exam Attendance - Search						
Student ID	996406410	Exam Period	200804REG 💌				
Course	All	Flag	All 💌				
	List Res	set Submit					

Attendance List for All Count: 4

	Name	Barcode	Course	Room	Period	Scan Time	Exam Time	СРО	Flag
996		2176101123813800	BIO153H5S	SE2105 A	200804REG	2008-04-25 12:42:52	2008-04-25 12:00:00 - 15:00:00	Jaime Kristen	
996 996 996		2176101123813800	CHM140Y5Y	SE2105 C	200804REG	2008-04-21 12:56:25	2008-04-21 12:00:00 - 15:00:00	Krystin	
996		2176101123813800	ENV100Y5Y	SE2105 A	200804REG	2008-04-16 16:44:30	2008-04-16 16:00:00 - 19:00:00	Robert	
996		2176101123813800	MAT134Y5Y	SE2105 A	200804REG	2008-04-16 12:28:59	2008-04-16 12:00:00 - 15:00:00	Joe	



Petitions Assessment

	Petition Form
	Deferral of unwritten final exam
	Edit Request Send Email
Tracking Number:	13653
Student Number:	
Student Name:	
Email:	
Phone:	
Cell Phone:	
Submitted on:	2008-04-29 15:51:00
When course was originally taken:	20081
Course:	AST201HSS
Section:	LECO101
Instructor:	Lester, John
Exam Details:	Date: 2008-04-17 Time: 12:00:00 - 15:00:00
Requested graduation:	
Reason:	On the day of April 17th 2008 I woke up to write my AST201 12:00 pm exam but could barely get out of bed. I had a severe headache, sore throat and nausea. This was the product of a cold I had been sick with weeks prior. The condition made it too difficult to write the exam and perform successfully. Fearful of jeepopardizing my academics I contacted my professor and he advised me to do the following deferral. I was able to reach my parents to escort me to a physician. The doctor diagnosed me with a severe headache and sore throat. He also tested me for strep throat and agreed that I was in no condition to write the examination. Attached to this statement is the University of Toronto medical note I had obtained from the doctor. I wish to defer this exam and write it at a later date because I believe that I was not in a healthy condition to write it on April 17th 2008. I could not carry myself to the examination place and if I attempted to write the examination I would've jeopardize my academics as well as hurt my university career. Thank you for your consideration and understanding.
Number of documents	4
Type of documents	med conf
Exam Information:	Exam Not Written, Please see below for exam schedule, attendance record & petition request Course Exam Date Start Time End Time Exam Attendance Petition Type Petition Sub Date Petition Decision
Decision:	In Progress V
Deferred Exam Period:	200808SPF-August special exam period, August 25-29, 2008
Deterred Chain Period.	
Tracking Notes	DC .
ROSI'ed:	
LOSS CONTROL C	
	Close Save



Deferred exam scheduling

 Traditionally held up to four months after the final exam (or the next time the course was offered)

- Growing concerns:
 - Ability of students to succeed after such a long time
 - Delay in true academic status being assessed
- Solution (beginning in April 2009):
 - Deferred exams to be held in week following regular exam period



How it works

- Instructors prepare two scripts prior to the regular exam period, one regular and one deferred
- 11 pm each night of exams
 - Absent students sent an e-mail with instructions on how to request a deferred exam
 - P&E office staff receive absentee report
- Within 72 hours of missed exam, students must petition online, provide supporting documentation, and pay deferred exam fee receiving e-mail after each step
- P&E office staff verifies documentation and sends any necessary warnings if petition/docs not appropriate



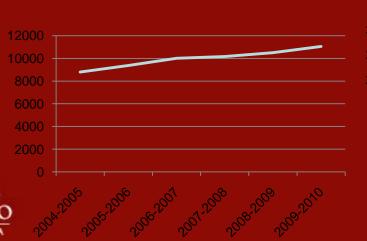
Impact of four changes

- Final exam scheduling maximizes student success
- A fair and equitable environment has been created with Chief Presiding Officers in each exam room
- Attendance collection complies with FIPPA policy and electronic data provides numerous benefits
- Students are writing exams when they are back to good health and already prepared, and students can graduate as planned
- Grades and academic status (academic probation, suspension, etc.) are now resolved within days/weeks as compared to months in past

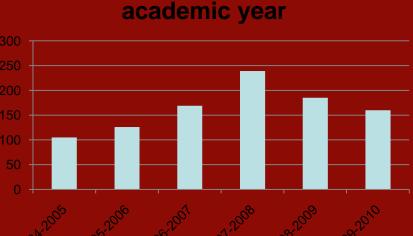


Impact of four changes continued

- No show rates to deferred exams have decreased by half
 - Previous 5 years, average no-show rate: 30.5%
 - April no-show rate: 14.5% (2009) and 13.7% (2010)
- Further deferred exam requests have also decreased markedly
 Further deferred exams by



Enrolment by academic year



Future plans

- Washroom breaks
- Cell phones
- Computer based examinations
- What are you doing that works well for your institution?



Questions?

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