

University of Waterloo
SENATE
Notice of Meeting

Date: Monday, November 15, 2004

Time: 4:30 p.m.

Place: Needles Hall, Room 3001

	<i>Agenda</i>	<i>Page</i>	<i>Action</i>
	<i>OPEN SESSION</i>		
4:30	<i>Consent Agenda</i>		
	<i>Motion: That items 1-3 [below] be approved or received for information by consent.</i>		
	1. Approval of the October 18, 2004 Minutes [enclosed]		Decision
	2. Report of the Chair		
	a. Recognition & Commendation	2, A1	Information
	3. Reports from the Faculties	2, A2-A13	Information
	<i>Regular Agenda</i>		
	4. Reports from Committees / Councils (A)		
4:35	a. University Appointments Review Committee	2, A14-A15	Information
4:40	b. Scholarships & Student Aid Committee	2, A16-A17	Advice / Information
	5. Business Arising from the Minutes		
4:45	a. Report of the Provost's Task Force on Undergraduate Student Financial Support [previously distributed]	2	Endorsement
5:00	b. Rae Review [UW's submission to be available at the meeting]	2	Information
5:15	c. School of Architecture Vote	2	Information
5:25	6. Report of the Chair		
	a. Environmental Scan	2	Information
5:40	7. Report of the Vice-President, Academic & Provost	2	Information
	8. Reports from Committees / Councils (B)		
5:50	a. Graduate & Research Council	2, A18-A22	Decision / Information
5:55	b. Undergraduate Council / Proposed Amendment to the Academic Calendar Dates 2005-06	2, A23-A33	Decision / Information
	9. Other Business		
6:10	a. Report of the University Librarian	2, A34	Information
	<i>CONFIDENTIAL SESSION</i>		
6:20	10. Approval of the October 18, 2004 Minutes [enclosed]		Decision
	11. Reports from Committees		
6:25	a. Honorary Degrees Committee	3, CS1-CS5	Decision
6:30	b. Dean of Mathematics Nominating Committee [to be distributed at the meeting]	3	Decision

The Executive Committee met on November 1, 2004 and wishes to report as follows:

OPEN SESSION

Consent Agenda

2. REPORT OF THE CHAIR

a. Recognition & Commendation. The Committee agreed to forward this report to Senate for information.

3. REPORTS FROM THE FACULTIES

The Committee agreed to forward these reports to Senate for information.

Regular Agenda

4. REPORTS FROM COMMITTEES / COUNCILS (A)

a. University Appointments Review Committee. The Committee agreed to forward this report to Senate for information.

b. Scholarships & Student Aid Committee. The Committee agreed to forward this report to Senate for advice and information.

5. BUSINESS ARISING FROM THE MINUTES

a. Report of the Provost's Task Force on Undergraduate Student Financial Support. The Committee understood that Senate would be asked to endorse this report, taking into account the advice of the Scholarships & Student Aid Committee.

b. Rae Review. The Committee understood that UW's submission to the Rae Commission would be available at the meeting.

c. School of Architecture Vote. The Provost is expecting to receive reports from both the Dean of Engineering and the Dean of Environmental Studies. If these reports are available, he will advise at Senate; if not, at the next meeting.

6. REPORT OF THE CHAIR

a. Environmental Scan. The President will report as appropriate, including on his recent trip to Kuwait and the *Maclean's* survey results.

7. REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST

The Vice-President will report as appropriate.

8. REPORTS FROM COMMITTEES / COUNCILS (B)

a. Graduate & Research Council. The Committee agreed to forward this report to Senate for approval and information as indicated.

b. Undergraduate Council / Proposed Amendment to the Academic Calendar Dates 2005-06. The Committee agreed to forward this report to Senate for approval and information as indicated. Also, it agreed to forward the proposed amendment to Senate for consideration.

9. OTHER BUSINESS

a. Report of the University Librarian. The University Librarian will provide a brief report.

University of Waterloo

SENATE

November 15, 2004

Report of the President

For Information

RECOGNITION & COMMENDATION

Chancellor

Research In Motion has been named “company of the year” in the Awards of Excellence for 2004 of the Yves Landry Foundation. The awards recognize those individuals and businesses that best exemplify the vision of the late Yves Landry, Chairman, President & CEO of Chrysler Canada (1990-1998), of forging a link between business, education and government and promoting technological education and skills training.

Faculty

Distinguished Professor Emeritus **Janos Aczél** (Pure Mathematics) has received the 2004 Kampé de Fériet Award, established to recognize exceptional contributions to the field of information processing and management of uncertainty. It was awarded at the International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems held in Perugia, Italy in July 2004.

The Society for Industrial Applied Mathematics’ Outstanding Paper Prize was recently awarded to Professor **Bertrand Guenin** (Combinatorics & Optimization) for his paper “Ideal Binary Clutters, Connectivity, and a Conjecture of Seymour,” co-authored with Gérard Cornuéjols of Carnegie Mellon University. The prizes are given to papers published by *SIAM Journal on Discrete Mathematics* in the three years prior to the year of the award, and are selected for their originality and effectiveness in offering a fresh look at an existing field or new areas of applied mathematics.

Professor **Jay Thomson** (Kinesiology) recently received recognition from the Office for Partnerships for Advanced Skills for Excellence in Teaching with Technology with particular reference to his course, *KIN 346 - Nutrition*.

**UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF APPLIED HEALTH SCIENCES TO SENATE**

Monday, November 15, 2004

For Information:

A. APPOINTMENTS

Adjunct Appointments

BRAND, Kevin, Assistant Professor, Department of Health Studies and Gerontology, July 1, 2004 to June 30, 2007.

LEATHERDALE, Scott, Assistant Professor, Department of Health Studies and Gerontology, September 1, 2004 to August 31, 2007.

MCCARGAR, Linda, Professor, Department of Health Studies and Gerontology, July 1, 2004 to June 30, 2007.

Changes in Appointment

GAGE, Bud, Adjunct Assistant Professor, Department of Kinesiology, **September 1, 2003 to September 1, 2006** .

Adjunct Reappointments

SYKES, Susan, Assistant Professor, Department of Health Studies and Gerontology, September 1, 2004 to August 31, 2007.



M.T. Sharratt, Dean
Applied Health Sciences

UNIVERSITY OF WATERLOO

REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE

NOVEMBER 15, 2004

For information:

A. *APPOINTMENTS*

Definite Term Reappointment - Full-time

VANDEN BOSCH, Nancy, Lecturer, School of Accountancy, September 1, 2004 to August 31, 2005.

Adjunct Appointments

ABBOTT, Carmeta (Professor Emerita), Associate Professor, Department of French Studies, September 1, 2004 to December 31, 2004.

BOYER, Luc, Lecturer, Department of Sociology, September 1, 2004 to December 31, 2004.

CORBY, Bill, Professor, Department of Political Science, September 1, 2004 to December 31, 2004.

HARRIS, Joel, Lecturer, Department of Drama and Speech Communication, September 1, 2004 to December 31, 2004.

MCCAULEY, Eva, Lecturer, Department of Fine Arts, September 1, 2004 to December 31, 2004.

RICHARDSON, Stephen, Lecturer, School of Accountancy, September 1, 2004 to December 31, 2004.

VIJAYAN, Devika, Lecturer, Department of French Studies, September 1, 2004 to December 31, 2004.

Adjunct Reappointments

BIRKETT, David, Lecturer, Department of Economics, January 1, 2005 to April 30, 2005.

COOK, Rob, Lecturer, Department of Economics, May 1, 2004 to August 31, 2004.

MITTLESTAEDT, Walter, Assistant Professor, Department of Psychology, September 1, 2004 to August 31, 2005.

SEIM, Robert (Professor Emeritus), Associate Professor, Department of Psychology, September 1, 2004 to December 31, 2004.

Graduate Students Appointed as Adjunct Lecturers

QUILTY, Lena, Department of Psychology, September 1, 2004 to December 31, 2004.

WATSON, Chris, Department of Psychology, September 1, 2004 to December 31, 2004.

APPROVED BY BOARD OF GOVERNORS AT MEETING OF OCTOBER 26, 2004

B. SABBATICALS

CARRINGTON, Peter, Professor, Department of Sociology, January 1, 2006 to June 30, 2006 and January 1, 2007 to June 30, 2007, twelve months at 85% salary.

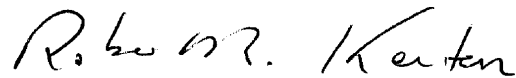
MITCHINSON, Wendy, Professor, Department of History, July 1, 2005 to December 31, 2005, six months at 85% salary.

C. ADMINISTRATIVE LEAVE

KAPUR, Ashok, Professor, Department of Political Science, September 1, 2005 to December 31, 2005, four months at full salary.

D. SPECIAL LEAVE

KAPUR, Ashok, Professor, Department of Political Science, January 1, 2006 to June 30, 2006, six months at full salary.



Robert R. Kerton
Dean, Faculty of Arts

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF ENGINEERING TO SENATE
November 15, 2004

For information:

A. APPOINTMENTS

New Probationary Term

HO, Pin-Han, Assistant Professor, Department of Electrical & Computer Engineering, September 1, 2004 - June 30, 2007. (PhD Queen's University 2002; MSc Queen's University 2000; MSc National Taiwan University 1995; BSc National Taiwan University 1993). Dr. Ho's research area is in resource management for the Internet backbone and Metropolitan-area networks. He has also co-authored a book on optical networking and survivability.

Probationary Term

GORBET, Robert, Assistant Professor, Department of Electrical & Computer Engineering, July 1, 2005 - June 30, 2008. (PhD University of Waterloo 1997; MASc University of Waterloo 1994; BSc University of Waterloo 1992).

WARD, Paul, Assistant Professor, Department of Electrical & Computer Engineering, July 1, 2005 - June 30, 2008. (PhD University of Waterloo 2002; MASc University of Waterloo 1993; BScE University of New Brunswick 1988).

Definite Term Reappointment – full-time

MCMANUS, Neil, Research Assistant Professor, Department of Chemical Engineering Department, September 1, 2004 - August 31, 2006.

Visiting Appointments

IYER, Aranvind, Scholar, Department of Electrical & Computer Engineering October 1, 2004 - September 30, 2005.

LU, Mei, Scholar, Department of Civil Engineering, October 1, 2004 - March 31, 2005.

KULKARNI, Sunil, Scholar, Department of Electrical & Computer Engineering, October 1, 2004 - September 30, 2005.

MHATRE, Vivek, Scholar, Department of Electrical & Computer Engineering, October 1, 2004 - September 30, 2005.

PIERA, Francisco, Scholar, Department of Electrical & Computer Engineering, October 1, 2004 - September 30, 2005.

REIDEMEISTER, Thomas, Scholar, Department of Electrical & Computer Engineering, September 9, 2004 - February 28, 2005.

TAPOLCAI, Janos, Scholar, Department of Electrical & Computer Engineering, September 15, 2004 - October 31, 2004.

WANG, Hongli, Scholar, Department of Civil Engineering, September 29, 2004 - September 28, 2006.

YANG, Yan, Scholar, Department of Electrical & Computer Engineering, September 20, 2004 - February 28, 2005.

YING, Yu, Scholar, Department of Electrical & Computer Engineering, October 1, 2004 - September 30, 2005.

Adjunct Appointments

BERG, Peter, Assistant Professor, Department of Mechanical Engineering, September 1, 2004 - August 31, 2007.

CAIN, Jeffrey S., Assistant Professor, Department of Systems Design Engineering, July 1, 2004 - June 30, 2007.

RAMASESHAN, Ramani, Assistant Professor, Department of Systems Design Engineering, August 15, 2004 - August 31, 2007.

VARMA, Rajiv, Associate Professor, Department of Electrical & Computer Engineering, September 1, 2004 - August 31, 2007.

Adjunct Reappointments

ARIARATNAM, Ariam, Professor, Department of Civil Engineering, October 2, 2004 - October 1, 2007.

Cross Appointments

BASIR, Otman, Associate Professor, Department of Electrical & Computer Engineering to Department of Systems Design Engineering, May 1, 2004 - April 30, 2007.

KAMEL, Mohmed, Professor, Department of Electrical & Computer Engineering to Department of Systems Design Engineering, May 1, 2004 - April 30, 2007.

KARRAY, Fakhri, Professor, Department of Electrical & Computer Engineering to Department of Systems Design Engineering, May 1, 2004 - April 30, 2007.

Cross Reappointments

LEGGE, Raymond, Professor, Department of Chemical Engineering to Department of Civil Engineering, September 1, 2004 - August 31, 2006.

Graduate Students appointed as Part-time Lecturers

ELNADY, Amir, Department of Electrical & Computer Engineering, September 1, 2004 - December 31, 2004.

B. *ADMINISTRATIVE APPOINTMENTS*

JERNIGAN, Ed, Professor, Department of Systems Design Engineering, Director of Waterloo Unlimited, September 1, 2004 - August 31, 2007.

ADMINISTRATIVE REAPPOINTMENTS

DAVIDSON, George, Professor, Director of Admissions, Engineering Undergraduate Studies Office, September 1, 2004 - August 31, 2007.

FOR APPROVAL BY THE BOARD OF GOVERNORS

C. *SABBATICAL*

CALAMAI, Paul, Assistant Professor, Department of Systems Design Engineering, January 1, 2005 - June 30, 2005, six months at 100% salary.

FU, Liping, Associate Professor, Department of Civil Engineering, January 1, 2005 - June 30, 2005, six months at 85% salary.

JERVIS, Eric, Associate Professor, Department of Chemical Engineering, January 1, 2005 - December 31, 2005, twelve months at 85% salary.



Adel S. Sedra
Dean, Faculty of Engineering

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN FACULTY OF ENVIRONMENTAL STUDIES TO SENATE
November 1, 2004

For Information:

A. APPOINTMENTS

Adjunct Appointment

DOWNEY, Sarah, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

Adjunct Reappointments

BUGDEN, Joni, Assistant Professor, Department of Geography, January 1, 2005 to April 2005.

DOWLING, Catherine, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

DOWLING, Paul, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

HUNT, Brian, (Professor Emeritus), Associate Professor, School of Architecture, September 1, 2004 to December 31, 2004.

KILCOYNE, Mary Catherine, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

LEVITT, Andrew, Associate Professor, School of Architecture, September 1, 2004 to December 31, 2004.

LIEBERMAN, David, Associate Professor, School of Architecture, September 1, 2004 to December 31, 2004.

LUZAR, Brigitte, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

RAFF, Paul, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

SAMPSON, Peter, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

STORIE, Christopher, Lecturer, Department of Geography, January 1, 2005 to April 30, 2005.

THUN, Geoffrey, Assistant Professor, School of Architecture, September 1, 2004 to December 31, 2004.

XUEREB, Michelle, Lecturer, School of Planning, September 1, 2004 to December 31, 2004.

Graduate Student Reappointed as Part-Time Lecturer

OLSEN, Daniel, Lecturer, Department of Geography, January 1, 2005 to April 30, 2005.

B. SABBATICALS

TO BE APPROVED BY THE BOARD OF GOVERNORS

MACDONALD, Marie-Paule, Associate Professor, School of Architecture, (November 1, 2004 to April 30, 2005) 6 months @ 100% salary.

MICHALENKO, Greg, Assistant Professor, Department of Environment and Resource Studies, (January 1, 2005 to June 30, 2005) 6 months @ 85% salary.

SUFFLING, Roger, Professor, School of Planning, (September 1, 2005 to August 31, 2006) 12 months @ 85% salary.



Ellsworth LeDrew
Interim Dean

/jm

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF MATHEMATICS TO SENATE
November 15, 2004

For information:

A. APPOINTMENTS

New Probationary Term

CSIMA, Barbara (BSc, 1998; MSc, 1999, both from the Univ. of Toronto; PhD, 2003, Univ. of Chicago), Assistant Professor, Dept. of Pure Mathematics, July 1, 2005 - June 30, 2008. Dr. Csima has been appointed in conjunction with NSERC's University Faculty Awards program. Currently she holds the prestigious H.C. Wang Assistant Professorship at Cornell University as a specialist in mathematical logic. She is the author of five research papers that deal with problems in computable model theory, decidability theory, and the application of computability (in the sense of mathematical logic) to geometry and algebra. She is uniquely qualified to work with the Department's current logicians Prof. R. Willard and Prof. R. Moosa, and thereby expand the Department's research activities in the area of model theory and its applications to algebra and geometry. She comes superbly recommended not only for her research, but also as a teacher. Thus, she can be expected to have a strong, positive influence on our undergraduate as well as our graduate students.

MORARU, Ruxandra (BSc, 1991; MSc, 1993, both from Université de Sherbrooke; PhD, 2001, McGill Univ.), Assistant Professor, Dept. of Pure Mathematics, July 1, 2005 - June 30, 2008. Dr. Moraru has been appointed in conjunction with NSERC's University Faculty Awards program. Since her doctorate, Dr. Moraru has held postdoctoral fellowships at McGill, the Institute of Mathematics in the Romanian Academy, and the University of Toronto. Currently she won a highly competitive post-doctoral fellowship at the Fields Institute as part of its thematic year in String Theory. Dr. Moraru is the author of seven research papers, and numerous more in preparation. She specializes in algebraic and differential geometry, sheaf theory, integrable systems and mirror symmetry, and complex manifolds. With her deep knowledge of geometry she will strengthen the Department very significantly in an area of rapid developments worldwide. Furthermore her work in geometry impinges on mathematical physics. Thus she will be able to take advantage of, as well as contribute to, research at the Perimeter Institute. Ruxandra has outstanding letters of recommendation. She is highly regarded as a teacher, who will help foster a rich learning environment for students at all levels.

Visiting Appointments

GIMENES, Itala (Universidade Estadual de Maringa), Professor, School of Computer Science, November 1, 2004 – October 31, 2005.

SCHUURMANS, Dale (Univ. of Alberta), Associate Professor, School of Computer Science, September 1, 2004 – August 31, 2007.

TARLE, Peter (Nortel Networks), Assistant Professor, School of Computer Science, October 1, 2004 – September 30, 2006.

ZHOU, Xiaoran, Scholar, School of Computer Science, September 1, 2004 – December 31, 2004.

Adjunct Reappointments

McGEE, Ian (Professor Emeritus), Professor, Dept. of Applied Mathematics, September 1, 2004 – August 31, 2005.

PALDUS, Josef (Professor Emeritus), Professor, Dept. of Applied Mathematics, September 1, 2004 – August 31, 2005.

Changes in Appointments

KOHANDEL, Mohammad, Dept. of Applied Mathematics, January 1, 2003 – December 31, 2005.

From: Post-Doctoral Fellow

To: Research Assistant Professor as of August 1, 2004

B. SABBATICAL

FOR APPROVAL BY THE BOARD OF GOVERNORS

CUNNINGHAM, William, Professor, Dept. of Combinatorics & Optimization, January 1, 2005 – June 30, 2005, with 100% salary. This is an early sabbatical.

GUENIN, Bertrand, Assistant Professor, Dept. of Combinatorics & Optimization, January 1, 2005 – June 30, 2005, with 100% salary. This is an early sabbatical.

MAVADDAT, Farhad, Associate Professor, School of Computer Science, March 1, 2005 – August 31, 2005 with 100% salary.

STINSON, Douglas, Professor, School of Computer Science, January 1, 2005 – June 30, 2005, with 100% salary.



Alan George
Dean

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF SCIENCE TO SENATE
November 15, 2004

For information:

A. *APPOINTMENTS*

Adjunct Appointments

CORSIL-GOSSELINK, Denise, Lecturer, Department of Chemistry, September 1, 2004 to December 31, 2004.

WEI, Li, Assistant Professor, Department of Physics, September 1, 2004 to August 31, 2007.

Adjunct Reappointments

DEVLIN, J.F. (Rick), Assistant Professor, Department of Earth Sciences, April 1, 2004 to March 31, 2007.

FRIND, Emil O., (Professor Emeritus), Professor, Department of Earth Sciences, September 1, 2004 to August 31, 2008.

GARTNER, John F., Professor, Department of Earth Sciences, September 1, 2004 to August 31, 2007.

McKINLEY, R. Scott, Professor, Department of Biology, November 1, 2004 to October 31, 2007.

MORAN, Kelley L., Assistant Professor, School of Optometry, September 1, 2004 to August 31, 2005.

Cross Appointment

JONES, Lyndon, Associate Professor, School of Optometry cross-appointed to Department of Biology, October 1, 2004 to September 30, 2007.

B. *DEATHS*

CARLSON, John C. (Jack), Professor, Department of Biology, September 26, 2004.

FOR APPROVAL OF THE BOARD OF GOVERNORS

C. *SABBATICAL*

DIXON, Brian, Associate Professor, Department of Biology, January 1, 2005 to June 30, 2005, 100% salary arrangements.

HONEK, John, Professor, Department of Chemistry, September 1, 2004 to August 31, 2005, 100% salary arrangements.

LEUNG, K. Tong, Professor, Department of Chemistry, July 1, 2005 to June 30, 2006, 100% salary arrangements.

SEMPLE, John C., Professor, Department of Biology, July 1, 2006 to December 31, 2006, 100% salary arrangements.

VANDERKOOY, John, Professor, Department of Physics, January 1, 2005 to June 30, 2005, 100% salary arrangements.

VIJAYAN, Mathilakath M. (Matt), Associate Professor, Department of Biology, January 1, 2005 to December 31, 2005, 85% salary arrangements.

A handwritten signature in black ink, appearing to read 'D.G. Dixon', with a long horizontal line extending to the right.

D.G. Dixon
Dean

DGD/lw

UNIVERSITY APPOINTMENTS REVIEW COMMITTEE (UARC)
Report to Senate
November 15, 2004

Proposals Reviewed: October 2003 to September 2004

UARC reviewed a total of 97 proposals for regular faculty appointments. Of these (38 females, 59 males), 15 were for tenured, 70 were for probationary (one joint between two Faculties), and 12 were for definite-term appointments. More detail is provided in the table on the next page. For comparison purposes, the total number of proposals reviewed in recent years was: 56 (1998-99); 69 (1999-2000); 52 (2000-01); 71 (2001-02); 90 (2002-03).

Electronic Advertising

In recent years, departments/schools have been advertising *via* websites, electronic bulletin boards, list-servers, etc; these are faster and less expensive than traditional printed means. UARC has compiled a list of such sites, many of which target certain audiences, women in particular.

Length of the Review Process

Appointment proposals from academic units and Faculties generally continue to be very good, and Chairs/Directors have been very helpful in providing any additional information requested. Advance notice of proposals continues to be important to ensure rapid turnaround. Policy 76 specifies five working days for the review process. During the past year, UARC members were able to complete most reviews within three or four working days unless there was some missing information and discussions with the Chair/Director or Dean were required.

The *Summary of Recruiting Efforts for UW Faculty Positions* form which Chairs/Directors are required to complete can be found at: <http://www.adm.uwaterloo.ca/infosec/forms/facultyappts.html>

Special Circumstances; Spousal Hiring

Bypassing the normal hiring process may be necessary in exceptional circumstances, provided the Provost approves and the UARC Chair is informed. For several years, it has been common practice for such proposals to be sent to the Chair of UARC for comment. The Chair, in turn, advises the Faculty Dean and the Vice-President Academic & Provost. In consultation with the Vice-President Academic & Provost, it has been agreed that, wherever possible, 'special' appointments will follow the guidelines outlined in Policy 76, including advertising for the positions. The Faculty Relations Committee has been addressing the issue of spousal hiring (e.g., explicit inclusion in Policy 76; criteria and processes for both appointments the same as for regular appointments).

Human Resource Development Canada (HRDC) Policy Change

In November 2001, the interim agreement which exempted specific disciplines and sub-disciplines from the two-tier advertising policy was expanded to exempt all disciplines. This enables institutions to carry out a single recruitment campaign; however, Canadians and permanent residents who meet the qualifications for a position must continue to be given priority for appointment; and the statement endorsed by HRDC about Canadians/landed immigrants being considered first must be included in advertisements. It is expected that the federal government will review this policy in 2004-05.

UARC Membership

Trudi Bunting (ES), Mario Gauthier (SCI), John Goyder (ARTS), Mohamed Kamel (ENG), Kirsten Morris (MATH), Flora Ng (ENG; UARC Chair), Steve Prentice (AHS), and Prabhakar Ragde (MATH). Roland Hall (SCI) served in 2004 while Gauthier was on leave. In 2003, in response to a heavy workload, the Provost and the President of FAUW agreed to the appointment of two additional members, one from Engineering, one from Mathematics.

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SUMMARY OF PROPOSALS FOR REGULAR FACULTY APPOINTMENTS
of duration two years or more
REVIEWED BY UARC
October 23, 2003 to September 30, 2004

Faculty	Cases reviewed by UARC	Nationality		Sex		Hires [~]		Appointment Type			Professorial Rank			
		CDN / Permanent Resident	Foreign Academic	F	M	F	M	Tenured	Probationary	Definite Term	LECT	ASSIST	ASSOC	PROF
AHS	8	7	1	4	4	3	3	-	8	-	-	8	-	-
ARTS	20	13	7	14	6	11	3	4	16	-	-	15	3	2
ENG	21.5*	11	10.5	5	16.5	5	15.5	6	15.5*	-	-	14.5*	4	3
ES	3.5*	2	1.5	1	2.5	1	2.5	1	3*	-	-	2.5*	1	-
MATH	25	11	14	8	17	8	15	4	17	4	2	18	3	2
SCI	19	10	9	6	13	5	7	-	11	8	4	11	4	-
Totals	97	54	43	38	59	33	46	15	70	12	6	69	15	7

[~] Note: Information re: hires made to date included, even though monitoring is not part of UARC's mandate. UARC is aware of ten who declined offers, three who accepted positions elsewhere, and one file that remains 'open' (pending CRC application).

* joint appointment between ENG and ES

October 22/04

Flora Ng
Chair, UARC

UNIVERSITY OF WATERLOO

SENATE SCHOLARSHIPS & STUDENT AID COMMITTEE

Report to Senate -- November 15, 2004

The Senate Scholarships & Student Aid Committee met on October 22, 2004 to provide advice and comment on the Final Report of the Provost's Task Force on Undergraduate Student Financial Support at the University of Waterloo. Subject to the concerns identified below with respect to both process and some of the recommendations, the Committee believes that the report and its recommendations are a "major step forward" for the University of Waterloo.

While the Committee agrees and supports most of the recommendations in the report, it has concerns which may be addressed when implementation details are worked out. The Committee's concerns relate specifically to recommendations D1 and D2 (lack of detail on assessment of need and on suggestions for integrating need and merit in a scholarship program) and, generally, with the lack of consultation with the Committee in the preparation of the report and with Deans' Council as the sole body to which recommendations are made and decisions taken. The Committee believes it important for it to be involved in the process going forward if, for no other reason, than to provide feedback on some of the implementation issues that will need to be considered. At a minimum, information provided to Deans' Council also should be provided to the Committee.

- A1: The Committee supports the recommendation to guarantee to meet the provincial unmet need as calculated by OSAP for all qualified University of Waterloo undergraduate students.
- A2: The Committee supports continuation of the existing practice in determining "real" (i.e., over and above the OSAP determination) unmet need using criteria developed by UW and specific to UW students. The Committee recommends that the existence of and criteria for the UW-specific determination of need be publicized broadly.
- A3: The Committee supports being proactive in determining student need through an automated process as opposed to self-identification.
- B1: The Committee supports using a wider range of mechanisms to ensure that all tuition fee set-aside funds are allocated, including the establishment of merit-based scholarships for students with financial need.
- B2: As a whole, the Committee expressed no concerns with allocating tuition fee set-aside funds to the undergraduate and graduate populations in proportion to their generation; however, one member indicated that this recommendation is contrary to the general principal of meeting financial need (shouldn't matter if you are an undergraduate or a graduate student).
- C1: The Committee supports the approach to OSOTF award development to combine financial need and academic merit.
- D1: Without knowing the implementation details, the Committee offers the following comments on establishing an entrance scholarship grid. One institutional grid will not meet the needs of UW's

Faculties; several different Faculty-specific grids will be required (“Waterloo has something better than a grid”). The design of the grids is particularly important to ensure that they are easily communicated and understood, and allow UW to “get the students it wants”, something the Committee thought might need to be especially addressed in Engineering and Mathematics (and Architecture) given that admission decisions are not based solely on marks. Scholarship guarantee must be based on criteria in addition to high-school marks.

- D2: Without knowing the implementation details, the Committee offers the following comments on the recommendation that, irrespective of a financial need component, recognition of merit be deemed “scholarship”. In particular, members are concerned with optics (it is especially obvious if two students from the same school apply to the same Faculty): if there is no way to guarantee that the best student academically (however judged) in a school will obtain a “scholarship” when another less strong student might because of the need component, then there is a problem. If a student with need makes the cut-off used to award scholarships then he/she should receive a “scholarship”. However, if that student does not meet the cut-off but is to receive money because of a need component, this is where the problem arises. The Committee recommends that the term “award” be maintained until the implementation details are worked out.
- E1: No concerns were expressed with this recommendation.
- F1: The Committee, as a whole, had no concerns with this recommendation, although one member suggested that this guarantee be “invisible” to avoid complacency.
- G1 through H1: No concerns were expressed.
- I1: Members thought this recommendation made good sense and suggested that the Faculty Development Officer model also be examined.
- I2 through I4: No concerns were expressed.

/tlc
October 25, 2004

Ian Williams
Chair

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL (SGRC)
REPORT TO SENATE
November 15, 2004

Senate Graduate & Research Council met on September 18, 2004, and agreed to forward the following items to Senate for approval and information, as noted. [*Summary re: CCCI appended; additional documentation for all items available in the Secretariat*]

FOR APPROVAL

CENTRES & INSTITUTES: New

Canadian Centre for Cultural Innovation (CCCI)

Phil Graham (Director designate), Canada Research Chair in Communication & Technology, Faculty of Arts

Council recommends that Senate approve the establishment, for five years (November 2004-November 2009) of the Canadian Centre for Cultural Innovation (CCCI) within the Canadian Centre of Arts & Technology (CCAT). CCCI was included as a significant component of the proposal for CCAT (Heather MacDougall, Director), the establishment of which was ratified by Senate in June 2003. The Executive Summary reads: "The University of Waterloo has an international reputation for technological innovation. By creating the Canadian Centre for Cultural Innovation, the University will support research leading to one of the world's largest, most innovative, and publicly accessible multimedia data repositories. The CCCI has attracted government and private sector interest from organizations looking to contribute to, develop, and use Canadian multimedia 'open resources'. These resources include video, audio and photographic materials. The CCCI will extend the University of Waterloo's reputation for technological innovation to promote cultural innovation associated with this data repository. Researchers responsible for the development of CCCI have already raised \$859,000 (CDN) and \$3.2 million (AUD) through competitive grants. CCCI researchers are poised to secure additional research funds, including an ARC Discovery Grant (DP0559510) entitled 'Enhancing Design Potentials for Broadband Environments: An interdisciplinary study of new content development in Australia and Canada' that will fund internationalisation of the Centre's research agenda. Through CCCI, the University of Waterloo will lead Canada in the development of relevant content for 'next generation' broadband environments." [*excerpt from the Centre proposal appended*]

FOR INFORMATION

Council has reviewed and, on behalf of Senate, approved or accepted the following:

1. ***FACULTY CURRICULAR ITEMS: Mathematics.*** Addition of statement about course requirement waivers, PhD Actuarial Science program; revision of MMath Actuarial Science (by Course Work) requirements; clarification of language requirement for all Pure Mathematics PhD students.
2. ***HUMAN RESEARCH ETHICS COMMITTEE: Membership.*** New members, three-year terms, to August 31/07: *Rob Parkinson* (Kinesiology), graduate student; *Colin MacLeod* (Psychology), Arts; and *Rod McNaughton* (Management Sciences), Engineering. Renewals, three-year terms, to August 31/07: *Mary Thompson* (Statistics & Actuarial Science), Mathematics; *Catherine Schryer* (English), Arts. One-year term, to August 31/05: *Emma Iserman* (Psychology), graduate student.
3. ***GRADUATE STUDENT SCHOLARSHIPS / AWARD.*** (1) Dominion of Canada General Insurance Company Graduate Scholarship in Actuarial Science; (2) Gamble Family MBET Scholarship; (3) Smart and Biggar MBET Scholarship; and (4) Montgomery-Graham Award for African Students.

Note to Senators: What follows is an excerpt from the CCCI proposal; the full proposal includes information re: budget; five-year outlook; associated research and infrastructure funding for CCCI-related research (e.g., research grants secured, grants submitted and pending); specific research questions to be addressed in each of the five broad areas; research funding proposals under development; current and in press publications related to CCCI; references; also, *CVs* of key members and letters of support for the establishment of the Centre.

CANADIAN CENTRE FOR CULTURAL INNOVATION (CCCI)

CCCI's aims are focused on a digital archive that promotes and facilitates interdisciplinary research in the economically important area of broadband content development (high quality, high resolution audio, visual, and photographic materials, and other large data sets, that both require and best utilise the distribution capacities offered by new and emerging broadband networks).

CCCI has initial funding through Canada Foundation for Innovation (CFI), Ontario Innovation Trust (OIT), and Canada Research Chair (CRC) grants awarded to Dr Phil Graham in 2002.

Current collaborators include researchers from the fields of communication, psychology, business, economics, law, education, journalism, engineering, information science, and computer science. In Canada, researchers from McGill University, the University of Toronto, the University of British Columbia, and the University of Ottawa have expressed strong support for the establishment of CCCI. [*see, also, pps 2-4 re: research questions and collaborations*]

Benefits and Opportunities. CCCI's digitisation infrastructures will provide an "open resource" archive of resources (*The Digital Depot*), for broadband content development. The resources CCCI will provide include video, audio, and photographic materials. Because the archive is oriented towards open public access, and is designed to encourage users to "re-purpose" the materials they find in the Depot to produce new content, it provides a unique platform for research into the legal, economic, cultural, and technical problems that the current and imminent broadband environments present. CCCI will provide benefits to the University, the K-W community, the Province, and the nation. At an applied research level, it will do so by providing digital resources and technical infrastructure that facilitates cultural innovation through broadband content production. At a pure research level, CCCI will provide new understandings about the potentials and character of broadband platforms for the development of new types of content designed specifically for and within these new media environments. Consequently, the Centre will further cement the UW's international research leadership in the area of Arts and Technology. CCCI will benefit:

- the local community by providing a high-profile, international research project that is demonstrably "media-friendly", thereby raising the profile of the K-W community. It will also raise the profile of the community by facilitating and promoting the emergence of local new media artists, and by promoting its vitality in the areas of Art, Science and Technology
- the Province by attracting leading international researchers from throughout the disciplines, by hosting international symposia featuring leading scholars, by enabling regional access to new media content markets, and by providing a centre through which new market opportunities will emerge.
- Canada by providing a focal point for world-recognised research into the future of inter-active broadband networks. This is evidenced in the interest and active participation from researchers in Europe, Asia, Australia, and the US.

Fit with UW's Strategic Research Plan. UW's Strategic Research Plan outlines key objectives, including support for research that connects basic and applied knowledge, that cultivates multi-disciplinary research on social issues, that trains graduate students and postdoctoral fellows, and promotes internationally collaborative research. Specifically, the section on Information Technology (3.1) states that UW supports research that focuses "on multimedia, object-oriented, structured (relational) and unstructured (Internet) data and text repositories... [which] will give rise to a variety of knowledge-based and knowledge-intensive research initiatives."

The CCCI will help the University achieve all of these goals. The CCCI's primary goal—to facilitate cultural innovation by providing accessible, high-quality multimedia to students, artists, and entrepreneurs—clearly promotes the University's mission to support basic and applied research that will enhance the economic and

social welfare of Canadians. By bringing together experts in multiple fields—from throughout the Arts and Technology-related disciplines—CCCI will engage in interdisciplinary research, not only in Canada but also abroad (Australia, US, Singapore, and Europe). Finally, *The Digital Depot* will help undergraduates become involved in research, especially students enrolled in the Arts & Business Digital Arts Communication Specialization, and will provide funded research opportunities for graduate, post-graduate, and postdoctoral scholars.

Mission. CCCI's mission is to advance pure and applied research into broadband content development. The Centre's research agenda fits UW's orientation towards innovating with new technologies. It does so by fostering the adoption and use of new technologies that preserve, transform, re-purpose, and thereby expand multimedia materials that feed the development of new and emerging broadband content industries. A long-term goal of CCCI is to be recognized locally, nationally, and internationally for its groundbreaking approach to understanding content development in "next-generation" broadband environments.

Objectives. To realise its mission, the operational objectives of CCCI include:

- Strengthening CCCI and CCAT's profile in Arts and Technology research;
- Extending pure and applied research that focuses on understanding which approaches to technology best enable widespread participation in broadband content development;
- Participating in the development of the world's largest, publicly accessible, internationally networked archive of multimedia digital resources;
- Networking with other Canadian and international centres that specialize in cultural innovation through the deployment of new technologies;
- Knowledge transfer, specifically through courses in the Digital Arts Communication (DAC) specialisation;
- Internationalising the DAC curriculum through integration with CCCI's *Digital Depot*, and through collaborations with international partners;
- Developing highly skilled researcher-practitioners for future broadband content industries;
- Communicating the results of research through journals, websites, books and "born-digital" forms of communication, including the content developed from the *Depot*;
- Fostering a collegial, inter-faculty, interdisciplinary community at UW focused on the development of broadband content; and
- Creating opportunities for the development of new cultural industries locally, nationally, and internationally.

Research Focus. CCCI's combination of infrastructure and research orientation are unique. While there are many digital archiving projects under way throughout the world, CCCI's focus is not specifically upon preserving or digitally curating multimedia, although that is one of its functions. Rather, CCCI's research focus is on how new archival and broadband technologies can best facilitate the production of new multi-media works through 'recursive re-adaptation' of archival materials. This focus raises a number of problems that are amenable to research across disciplinary, legislative, and geographical domains.

Research questions addressed by CCCI fall into five broad areas: Intellectual Property; Data and Interface design; Information Systems research; Business Model research; and Arts research. The broad scope of the research problems associated with CCCI entails an interdisciplinary approach to all the research areas listed below, and each has basic and applied aspects. Methodologies will naturally vary from question to question, and with the disciplinary makeup of the research teams involved. It is expected that CCCI researchers will promote convergence of both qualitative and quantitative methods.

1. **Intellectual property and copyright law (national and international):** While much existing intellectual property research focuses on consumption-side issues (e.g., issues surrounding file-sharing networks such as Napster and MP3), there is little research focused on the many intellectual property problems surrounding production-side issues that broadband systems raise.

These questions will be addressed in collaboration with *iCommons* Canada researchers Marcus Borfnreund and Michael Geist who are based at the University of Ottawa, and with international partners at Stanford University's *Creative Commons* project, Queensland University of Technology's Law School *iCommons* Australia project, and *AESharenet*, an education-oriented licensing organisation funded by the Australian Federal Government.

2. **Database and interface design:** A general purpose, open access, repository-based production system requires as-yet undeveloped systems for describing data as it gets digitised specifically for use by content producers. Standards developed by metadata initiatives such as the *Dublin Core*, *D-Space* and *Maenad* projects are useful starting points. However, these are based more on curatorial and archival models that

are not necessarily useful to people wishing to access multimedia for the purposes of producing new materials. This is evident when the metadata systems for production-only systems (such as Avid's *Meta-synch* and Disney's *Timone* systems) are taken into account. But because CCCI is oriented towards both preserving and re-purposing content, no existing metadata system is sufficient.

These questions will be addressed in collaboration with the UW Library and leading researchers from UW's *Institute for Computer Research*, the *Distributed Systems Technology Centre*, the University of Queensland's *Information Environments School*; Virginia Tech's *Centre for Digital Discourse and Culture*, *The Internet Archive*, and the University of British Columbia's *Public Knowledge Project*.

- 3. Information Systems Research:** The complex system of data, interfaces, distribution networks, disciplines, professions, and institutions that are involved in CCCI's activities will, if successfully implemented, change the nature of how creativity is performed on a national and international basis. Information Systems research is necessary to track impediments, advances, and innovations in the development of a broadband content industry. These are issues that go well beyond any single organisation, and the paradigm of IS research, focused as it typically is on "knowledge management" and "e-commerce" within specific organizational contexts will be presented with new challenges. Not the least of these will be research into how non-market ("free") models fit into a world increasingly driven by market-based imperatives. Artists have long been "giving away" their products in certain contexts, such as when musicians "pitch" for a job to score a movie. Yet such moves are not seen as "investment" in any mainstream or traditional sense: they are typically seen as, at best, anomalous risk-taking ventures; at worst, frivolity. The challenge for accountancy-based IS research is to understand how a system-wide shift in a specific sector (in this case, the Creative Industries) towards a "free" model will impact upon the sector, both in terms of systems operations and in terms of auditing systems.

These questions will be addressed in collaboration with researchers from the University of Queensland's *UQ Business School*, the *Distributed Systems Technology Centre*, *Bell University Laboratories*, UW's *Institute for Computer Research*, Monash University's *Information Technology Faculty*, and UW's *Centre for Cultural Management*.

- 4. New business models for the new economy:** Providing open access to multimedia materials can be very profitable. The Internet Archive (www.archive.org) contains more than 1000 ephemeral films contributed by Rick Prelinger. Prelinger runs a stock footage archive. By giving open access to many of his films online, Prelinger has increased his sales (Prelinger, 2004). Pornography on the Internet has used the "free sample" model since its inception. It has become one of the largest business sectors on the internet (Legon, 2003). On a more conservative front, Amazon.com has discovered that giving people free access to parts of books, and to sample audio tracks also increases sales. Of course there are *prima facie* reasons—different ones for each of the examples listed above—as to why these are particularly successful examples of gaining financial returns by giving material away. However, it may be that there are more general principles at work here (Raskin, 2004) which indicate that media economics is rapidly changing. There are quantitative and qualitative changes in the new media environment that impact greatly upon traditional business assumptions. For example, in 2004 consumers spent more on media content than did advertisers for the first time in history (Mandese, 2004). Such a change, combined with greatly lowered barriers to production and distribution, signals that the business rules for content production have changed.

These questions will be addressed in collaboration with researchers from the University of Queensland's *UQ Business School*, *Bell University Laboratories*, Monash University's *Information Technology Faculty*, and UW's *Centre for Cultural Management*.

- 5. Arts research:** Recording information about where a specific multimedia work was made, by whom, and so on, is a relatively unproblematic task. Yet, extensive social scientific and humanities research is still required to provide descriptors that respond quickly to creative needs of CCCI's users and other multimedia producers. CCCI provides a wealth of research opportunities for Arts research. From questions of form, interaction, and cultural identity; to questions of aesthetics, education, and literacy; to questions of psychology, media, and language; to questions of logic, ethics, and grammar, researchers in the Arts will benefit from CCCI's infrastructure and orientation.

These questions will be addressed in collaboration with researchers from the University of Queensland's *School of Education*, McGill University's *Education Faculty*, the University of Toronto's *Centre for Culture and Information Technology*, Monash University's *Information Technology Faculty*, Singapore's *National*

Institute for Education, UW's Centre for Cultural Management, Virginia Tech's Centre for Digital Discourse and Culture, Cornell University's Department of Anthropology; and the University of British Columbia's School of Literacy and Technology.

Collaborations with other archival projects (national and international): the University of Queensland's ACRO project, The Internet Archive, and the Hockey Hall of Fame Archive, and is currently developing collaborative projects with the UW Library, Bell University Laboratories, Open Text, Canarie, and the Canada Institute for Scientific and Technical Information (CISTI).

Reporting. CCCI will report annually to the Director of CCAT and the Dean, Faculty of Arts.

Organizational Structure. CCCI will be led by a **Board of Directors** drawn from UW, partner universities, and private sector partners. A Board of Directors for the Centre will meet annually to review progress and approve the annual budget and discuss research plans. Proposed Board membership:

- Chair: Director, CCAT: Heather MacDougall
- Centre Director: Phil Graham
- UW VP University Research: Paul Guild (*ex officio*)
- Dean, Faculty of Arts: Robert Kerton (*ex officio*)
- Director, Bell University Laboratories and ICR: Vic DiCiccio (*ex officio*)
- University Librarian (UW): Mark Haslett (*ex officio*)
- Director, CCIT (University of Toronto): Bill Thompson (*ex officio*)
- Manager, Hockey Hall of Fame Archives: Craig Campbell (*ex officio*)
- Director, UW DAC program: David Goodwin (*ex officio*)
- Distinguished Professor Emeritus, UW: Don Cowan
- Representatives from private sector partners: Sunshine Chen (Urbanimagination & design), Brian Denomme (Crossroads Consulting), Pat Hartmann (Dynamix), others TBD.

An **Operational and Technical Committee** provides advice to the Director on the day-to-day running of the Centre and advises the Director on major financial and technical decisions. The Committee will meet bi-monthly for the first 12 months, then once per term as processes become more established. Members:

- Director of CCAT: Heather MacDougall
- Director of CCCI: Phil Graham
- Director, Bell University Laboratories and ICR: Vic DiCiccio
- Distinguished Professor Emeritus, UW: Don Cowan
- CCAT Manager: Scott Spidell
- Project Manager: TBD
- Technical Officer: TBD
- CCCI Researchers: David Goodwin, Glenn Stillar, Gerd Hauck, Andy Houston, Jill Tomasson-Goodwin, others TBD
- Faculty Research Development Officer, Faculty of Arts: Naomi Sunderland

Proposed Members

Core Members: Phil Graham, David Goodwin, Gerd Hauck, Andy Houston, Glenn Stillar, Jill Tomasson-Goodwin

Associate Members: Don Cowan, Vic DiCiccio, Mark Haslett

Student Members: TBD.

Affiliate Members: Bill Thompson (CCIT University of Toronto); John Willinsky (Pacific Press Professor of Literacy, University of British Columbia); David Rooney (Associate Director, Centre for Social Research in Communication, University of Queensland); Greg Hearn (Research Director, Creative Industries Faculty, QUT); Joanne Tacchi (Senior Research Fellow, Creative Industries Faculty, QUT); Marcus Bornfreund (Manager, *iCommons* Canada, University of Ottawa); Roger Slee (Dean of Education, McGill University); Allan Luke (Dean, National Institute for Education, Singapore); Jeremy Hunsinger (Manager, Centre for Digital Discourse & Culture, Virginia Tech); others TBD.

Public and Private Sector Partners: TBD.

CCCI facilities are funded by a CFI grant and in-kind contributions, and include: industry standard digitising facilities for audio, video, and photographic material (CFI: \$359,000); transitional housing in the BF Goodrich building (VP Academic); infinite archival space at the Internet Archive (www.archive.org); technical support (UW IST – TBD); and broadband infrastructure (UW Network Integration Group – TBD).

University of Waterloo

SENATE UNDERGRADUATE COUNCIL

Report to Senate – November 15, 2004

Senate Undergraduate Council met on October 12, 2004 and agreed to forward the following items to Senate for approval and information, as indicated below [*further details may be obtained from the Secretary, ext. 5924*].

FOR APPROVAL

Academic Calendar Dates 2005-2006

Council recommends adoption of the dates [attachment #1] which have been established in accordance with the *Guidelines for Determining Academic Calendar Dates*.

New Plans [effective September 1, 2005]

***Faculty of Arts
School of Accountancy
Accounting & Financial Management***

***Financial Specialization
Management Accounting Specialization
Public Accounting Specialization***

The following specializations have been created to assist the School in describing to the appropriate professional bodies that review accounting courses for qualifying purposes the respective mix of courses and to provide students with more flexibility. The specializations recognize a new package of courses in finance in addition to existing groups of courses in public and management accounting. Although the total number of required courses remains the same, students can now select a wider range of AFM courses and have the specializations recorded on their transcript.

Finance Specialization

The specialization is made up of the following courses:

AFM 472	Topics in Corporate Finance
AFM 474	Derivatives and Risk Management
AFM 475	Fixed Income Securities
AFM 492	Financial Statement Analysis
ECON 321	Introduction to Econometrics
ECON 405	Quantitative Finance

Management Accounting Specialization

The specialization is made up of the following courses:

AFM 341	Accounting Information systems
AFM 361	Taxation I
AFM 451	Audit Strategy
AFM 481	Cost Management Systems
AFM 491	Advanced Financial Accounting
ECON 231	Introduction to International Economics
MSCI 432	Production and Operations Management

Public Accounting Specialization

The specialization is made up of the following courses:

AFM 341	Accounting Information Systems
AFM 361	Taxation I
AFM 401	Accounting Theory
AFM 451	Audit Strategy
AFM 461	Taxation II
AFM 481	Cost Management Systems
AFM 491	Advanced Financial Accounting

Faculty of Mathematics
Transferring into a Co-operative System of Study

Students, other than UW co-op students, with 3.0 or more units of math transfer credits ~~beyond first year~~ are normally not eligible for the ~~co-op~~ Co-operative system of study.

The above changes are proposed for clarification purposes.

Faculty of Mathematics
Computer Science Major Average Calculation

For Computer Science Major plans, the major average ('MAV') is based upon CS 134, CS 136, and all the student's subsequent CS major courses, as well as CS courses numbered 600 and higher, and courses CO 487, ECE 222, ECE 427, ECE 429, SE 112, SE 240, SE 382, SE 463, SE 464, SE 465, and STAT 440.

Including these courses in CS major averages will allow for a more accurate way of measuring student performance in courses with serious computer science content. The change also updates the list of CS courses to include the new course CS 136.

Faculty of Mathematics
Computational Mathematics

Wording will be added to the plan description to prevent Computational Math students from completing a CS minor (i.e., "students in Computational Mathematics may not claim a Computer Science Minor"). Computational Mathematics students must complete a minimum of six courses and awarding a minor for two extra courses is not appropriate.

Faculty of Science
Honours Chemistry
Materials Chemistry Specialization

The Specialization in Materials Chemistry is the first of a set of specializations that the Department plans to introduce. Materials chemistry is a branch of chemistry aimed at the preparation, characterization, and understanding of substances and systems that have some specific or potential function. It integrates elements from traditional areas of chemistry, and draws also from other disciplines, including physics and engineering. The introduction of this Specialization will allow students to focus on fundamental scientific issues that are unique to materials. The Nanotechnology Engineering Curriculum Committee has agreed to allow students from the Departments of Chemical Engineering, Chemistry, and Electrical & Computer Engineering to enrol in NE courses if there are spaces to accommodate them.

Requirements

In order to graduate in Honours Chemistry (Specialization in Materials Chemistry), a student must meet all of the requirements of Honours Chemistry, plus the additional requirements outlined below:

1. Three of the technical electives in this plan must be chosen from CHEM 413*, CHEM 470, CHEM 471, CHEM 471L, PHYS 335, NE 151, NE 226, NE 335. (*Not all of the courses offered in CHEM 413 series can be counted towards the Specialization in Materials Chemistry. See the Undergraduate Officer for more information about which courses can be counted).

2. The senior year research project (CHEM 494A/B) must involve a project related to materials chemistry, as approved by the Chemistry Undergraduate Advisor.

CHEM 413	Special Topics in Inorganic Chemistry
CHEM 470	Introduction to Polymer Science
CHEM 471	Polymer Properties & Polymerization
CHEM 471L	Experiments in Polymer Chemistry & Engineering
PHYS 335	Condensed Matter Physics
NE 151	Introduction to Inorganic Chemistry, Materials Science, and Engineering
NE 226	Characterization of Materials
NE 335	Macromolecular Science II

Admission Requirement Changes [effective September 2008]

School of Optometry

Part of the accreditation for the School of Optometry requires that a minimum of three years (15.0 units) are completed before admission can be made into the School. The accreditation also requires more course work in human anatomy, embryology, genetics, histology and immunology. As such, these courses will now be required prerequisites.

Requirements

Applicants should satisfy the Admissions Committee that they are well prepared academically for entry to the School of Optometry. Successful applicants must have attended University for at least three years (15.0 units) prior to acceptance into the OD program. The following courses represent the required prerequisites for admission to the School of Optometry:

- General Biology (with lab) - two terms, BIOL 130/130L, Cell Biology; BIOL 211, Vertebrate Zoology
- General Chemistry (with lab) - one term, CHEM 120/120L, Physical and Chemical Properties of Matter
- Physics (with labs) - two terms, PHYS 111/112, 111L/112L or 121/122, 121L/122L, General Physics
- Calculus - one term, MATH 127, Calculus 1 for the Sciences
- Introductory Psychology - one term, PSYCH 101, Introductory Psychology
- Linear Algebra or Geometry and Trigonometry - one term, MATH 125 - Applied Linear Algebra 1
- English - one term, any one-term course
- Physiology (Human or Mammalian) or Human Anatomy & Physiology - two terms, BIOL 273 Principles of Human Physiology 1; BIOL 373 Principles of Human Physiology 2
- Introductory Ethics - one term, PHIL 218 Ethical Theory; PHIL 219J Practical Ethics; PHIL 220 Moral Issues or PHIL 226G Ethics and the Life Sciences suggested
- Organic Chemistry - one term, CHEM 266, Organic Chemistry
- Microbiology - one term, BIOL 140, Fundamentals of Microbiology
- Biochemistry - one term, CHEM 237, Biochemistry
- Statistics - one term, STAT 202 or 204, Statistics
- Human Anatomy - one term BIOL 201, Human Anatomy
- Embryology - one term, BIOL 303, Embryology
- Genetics - one term, BIOL 239 Genetics
- Histology - one term, BIOL 302, Functional Histology
- Immunology - one term BIOL 441, Immunology.

Note: changes identified in underline are new; the courses identified in *italics and underline* were already previously recommended prerequisites.

Changes to Regulations and Procedures [effective September 1, 2005]

Faculty of Science

Failed – Required to Withdraw

A student will normally be failed – required to withdraw from the Faculty of Science after failing ~~more than~~ 1.5 units in any academic term, or five cumulative units, or after failing to achieve an overall cumulative average of at least 55% and a cumulative average of 55% in all Science courses, or if unlikely to profit from further study, in the opinion of the Examinations and Standings Committee.

The above changes are proposed for clarification purposes.

FOR INFORMATION

On behalf of Senate, Council approved several changes to academic plans, new courses, course changes and course inactivations for the Faculties of Arts (Accountancy, Arts Special Programs, Classical Studies, English Language & Literature, French Studies, Legal Studies, Sexuality, Marriage & the Family, Women's Studies, Spanish & Latin American Studies); Engineering (Mechanical, Mechatronics, Management Sciences); Mathematics (Actuarial Science, Business Administration & Mathematics Double Degree, Honours Computational Mathematics, Computer Science, Honours Bioinformatics, Three-year General, Joint Honours Academic Plans with Mathematics, Mathematics Minor, Applied Mathematics, Statistics); Science (Atmospheric & Planetary Sciences, Chemistry, Computational Science, Environmental Science, Geochemistry, Science and Business) and various Inter/Multi-disciplinary plans (Fine & Performing Arts, International Studies, Legal Studies & Criminology, Sexuality, Marriage & the Family, Spirituality & Personal Development, Women's Studies).

/tlc

Gail Cuthbert Brandt
Chair

Academic Calendar Dates, 2005-2006

Fall 2005	Proposed Dates
Unofficial grades for Spring 2005 begin to appear in QUEST	August 14, Sunday
Work term begins*	August 29, Monday
Labour Day Holiday	September 5, Monday
Classes begin	September 12, Monday
Spring 2005 standings available in QUEST	September 15, Thursday
Distance Education Course open enrolment ends for Fall 2005	September 16, Friday
Class enrolment appointments begin for Winter 2006	October 17, Monday
On campus open enrolment ends for Fall 2005	September 23, Friday
Thanksgiving	October 10, Monday
Fall Convocation	October 22, Saturday
Class enrolment appointments end for Winter 2006	October 29, Saturday
Open enrolment begins for Winter 2006	October 31, Monday
Classes end	December 5, Monday
Pre examination study days	December 6-7, Tuesday, Wednesday
On campus examinations begin	December 8, Thursday
Distance Education examination day	December 10, Saturday
On campus examinations end	December 22, Thursday
Unofficial grades for Fall 2005 begin to appear in QUEST	December 23, Friday
Work term ends*	December 23, Friday
Grades due **	December 15-23, 2005 Thursday- Friday and January 4, Wednesday
Teaching days	60
Pre examination study days	2
Examination days	13

Winter 2006	Proposed Dates
New Year's Day Holiday	January 2, Monday
Work term begins*	January 2, Monday
Classes begin	January 3, Tuesday
Distance Education Course open enrolment ends for Winter 2006	January 9, Monday
On campus open enrolment ends for Winter 2006	January 16, Monday
Fall 2005 standings available in QUEST	January 23, Monday
Reading Week (All Faculties except Engineering & Mathematics)***	February 20-24, Monday-Friday
Reading Days (Engineering and Mathematics)***	February 23-24, Thursday, Friday
Pick your plan week begins	March 6, Monday (subject to change)
Pick your plan week ends	March 10, Friday (subject to change)
Class enrolment appointments begin for Spring 2006	March 20, Monday
Classes end (Engineering & Mathematics)	March 29, Wednesday
Pre examination study days (Engineering & Mathematics)	March 30- April 5, Thursday-Wednesday
Class enrolment appointments end for Spring 2006	April 1, Saturday
Open enrolment begins for Spring 2006	April 3, Monday
Classes end (All Faculties except Engineering & Mathematics)	April 3, Monday
Pre examination study days (All Faculties except (Engineering & Mathematics)	April 4-5, Tuesday, Wednesday
On campus examinations begin	April 6, Thursday
Distance Education examination day	April 8, Saturday
Good Friday (University closed)	April 14, Friday (no examinations scheduled)
Holy Saturday	April 15, Saturday (no examinations scheduled)
On campus examinations end	April 22, Saturday
Unofficial grades for Winter 2006 begin to appear in QUEST	April 23, Sunday
Work term ends*	April 28, Friday
Grades due **	April 13-May 3, Thursday-Wednesday
Teaching days (Engineering & Mathematics)	60
Teaching days (Other Faculties)	60
Pre examination study days (Engineering & Mathematics)	5
Pre examination study days (Other Faculties)	2
Examination days	13

Academic Calendar Dates, 2005-2006

Spring 2006	
Work term begins*	May 1, Monday
Classes begin – Spring term	May 1, Monday
Distance Education Course open enrolment ends for Spring 2006	May 5, Friday
On campus open enrolment ends for Winter 2006	May 12, Friday
Victoria Day	May 22, Monday
Winter 2005 standings available in QUEST	May 23, Tuesday
Class enrolment appointments (continuing students) begin for Fall 2006	June 12, Monday
Spring Convocation	June 14-17, Wednesday-Saturday
Class enrolment appointments (continuing students) end for Fall 2006	June 24, Saturday
Canada Day Holiday	July 3, Monday
Class enrolment period begins for Fall 2006 (new students)	July 17, Monday
Classes begin – Summer session	July 4, Tuesday
Class enrolment period ends for Fall 2006 (new students)	July 29, Saturday
Open enrolment begins for Fall 2006	July 31, Monday
Classes end – Spring term	July 26, Wednesday
Pre examination study days – Spring term	July 27-28, Thursday, Friday
On campus examinations begin – Spring term	July 31, Monday
Distance Education examination day	August 12, Saturday
Civic Holiday	August 7, Monday
Classes end – summer session	August 11, Friday
On campus examinations – summer session	August 12, Saturday
On campus examinations end – spring term	August 12, Saturday
Grades due - spring and summer**	August 8-August 31, Tuesday-Thursday
Unofficial grades for Spring 2006 begin to appear in QUEST	August 13, Sunday
Work term ends *	August 25, Friday
Teaching days – Spring term	61
Pre examination study days	2
Examination days	11

*Recommended Co-op work term start and end dates. Actual dates may vary depending on employer or student requirements

** Grades for on campus courses are due in the Registrar's office throughout this period. Due dates for specific courses are normally scheduled 7 days from the date of the final examination. Grades for courses without a scheduled final examination are normally due 14 days after the start of examinations. Grades for Distance Education courses are due on the last date of the periods specified above (i.e. January 4 for Fall, May 3 for Winter and August 31 for Spring)

*** Co-operative employment interviews will continue during this period

Academic Calendar Dates, 2005-2006
GUIDELINES FOR DETERMINING ACADEMIC CALENDAR DATES

The following are principles and guidelines either formally agreed upon by Senate or adopted as common practice in determining the dates for the academic year.

- That the practice of setting dates for each academic year continues to be an annual exercise.
- That there be no fewer than 12 examination days in the Fall and Winter Terms, and 11 examination days in the Spring Term
- That there be no fewer than 2 study days between classes and examinations
- That there be no fewer than 60 teaching days in a term. A clear rationale for fewer than 60 teaching days must be communicated to Senate at the time calendar dates are approved.
- That in the Fall Term no examinations be scheduled beyond December 22
- That Fall Term classes begin the Monday following the Labour Day Holiday
- That the start date for Winter Term be January 3 when that date falls on a Monday, Tuesday or Wednesday. Otherwise the start date is the first Monday following January 3. In the event of Monday, January 3 being a declared holiday the term would begin January 4.
- That the Winter Study Period must begin on the third Monday in February in keeping with an informal agreement with Wilfrid Laurier University and University of Guelph
- The start date for Spring Term is normally May 1, 2 or 3 when these dates fall on a Monday, Tuesday, or Wednesday. Otherwise the start date is the first Monday following May 3
- In Winter and Spring Terms the option is allowed of taking the first day of term for registration with classes beginning on the second day. Such options are to be approved by Senate at the time calendar dates are approved.
- In calculating teaching days in a term, Saturdays, Sundays and statutory or University holidays are excluded. In calculating examination days, Saturdays which fall within the period are included, whereas Sundays and statutory or university holidays are excluded. One exception to the above, approved by Undergraduate Operations Committee is that normally examinations will not be scheduled on the Saturday which follows Good Friday when that day falls within the examination schedule.
- Grades due dates for on-campus courses are normally scheduled seven days from the date of the final examination. Grades for courses without a scheduled final examination are normally due 14 days after the start of examinations. Grades for Distance Education courses are due on the last date of the grades submission period.

Prepared By
K.A. Lavigne, Registrar
December 17, 2001

MEMORANDUM

November 1, 2004

TO: Members of UW Senate

FROM: Frank Zorzitto

RE: The proposed academic calendar for 2005-2006

I am seeking to amend the standing practice at the University of having two academic timetables during Winter terms.

The Faculties of Mathematics and Engineering seem to prefer to take an abbreviated mid-Winter study break of two days, rather than the full reading week that the other Faculties take. Then the Mathematics and Engineering Faculties seem to prefer to cease lectures three teaching days earlier than the other faculties.

I have heard some reasons for this practice. Here is a sampling of them.

Some say that the extra pre-exam study days at the end of term are valuable to the students. Yet, if this principle is so sacrosanct, why are these two Faculties quite content to give their students only two days to study in the Fall and Spring terms? I can see where in Fall there is no time for extra pre-exam study days, but that excuse won't work for Spring terms.

Some argue that if we give students a full reading-week, the students won't use it to study, but rather they will sleep more or ski or simply goof off. Yet, who is to stop students from doing that at any time? Students must be treated like the responsible adults that they are. With puritanical zeal we seem to want to regulate their study behaviours. I don't think that's our job.

Some say that, since the students are here for co-op interviews, and presumably cannot go away on vacation, they might as well be here for classes. By this argument co-op students, forced to stay here for a mere interview, would be thoroughly irritated. Yet there is no shortage of ways that students can be irritated. For instance, a lot of students are irritated at the current abbreviated study period. Some students and their teachers are irritated that their job interviews overlap with their courses. We are talking about a reading week, not an intended opportunity to take a vacation. Thus it is fair to presume that a co-op student who wants a job will be here for interviews, regardless of the class schedules. In fact, if there are no classes in that week, is it not easier to schedule interviews that do not conflict with

classes? The Co-op department should try hard to schedule as many interviews as possible during reading week.

Some believe that the break in the continuity of lectures will lead to a sort of forgetfulness effect in the students' brains, after which they won't be able to pick up from where they left off. Yet, that's just a far fetched opinion, and I don't buy it. If such a view were to be valid, then the week-long pre-exam study period for Mathematics and Engineering students, might have a similarly dangerous effect.

Then there is the argument that by having a shorter reading break, the co-op students can get out into the work force sooner. Apparently there was a time when Engineering students did that. However, this situation no longer prevails. Now the Winter exams for all students end on the same day in April.

Some would protest that it is the Faculties' right to decide their teaching timetable. Yet, while Faculties have many rights, the setting of a separate University academic calendar should not be one of them. Only Senate approves the academic calendar. Would Senate accept if a Faculty chose to have a different exam timetable? Would it accept if a Faculty chose to skip orientation week and start classes the day after Labour Day? Would Senate go for it if a Faculty wanted to have formally scheduled classes on a Saturday or a Sunday? Why does Senate allow the split schedule in Winter? After some consideration it should be obvious that the academic timetable is in the domain of Senate not of the Faculties, and that it is the duty of Senate to set a single timetable that on balance best serves the needs of all Faculties and all students.

There is one outstanding reason to have a mid-Winter reading week for all students and professors in the University. Four of the six faculties at Waterloo and most of the universities in Ontario have understood that Winter in Canada is tough. Unlike Fall that starts with an orientation week fresh from Summer breaks and when the weather is good, or unlike Spring which is blessed with great weather plus a number of long weekends and diminished administrative agenda, the Winter term is a stressful grind. The mid-Winter reading week is a time when we can recoup our energies, maybe read, maybe rest, or maybe catch up on homework or correspondence, or maybe finish writing a computer project or a research paper, or take a bunch of co-op interviews. I am pretty sure that I represent many colleagues in my Faculty of Mathematics (but maybe not enough colleagues) and also many students, who crave the opportunity to just catch up with their heavy obligations in the middle of Winter.

It is important to observe that a full reading week in Winter does not lead to any reduction in teaching days. The teaching days lost during reading week are made up at the end of term. The principle of having no fewer than 60 teaching days remains intact.

The current split schedule in Winter term is a rather pointless phenomenon. Furthermore, there are negative consequences of a practical nature with a split schedule.

For example, some courses are taught by Mathematics to students in other Faculties. In some years I have witnessed the ironic effect that a MATH course taught to Science students was cancelled during reading week because the students were not there. Then it was cut short at the end of term because it was a MATH course. Thus that course did not offer its expected 60 teaching days.

Then there is the effect that seems to contradict one aspect of the Guidelines for Determining Academic Calendar Dates. Namely we are supposed to start the Mid-Winter study period on the third Monday in February in keeping with an informal agreement with Laurier and Guelph. By having classes Monday to Wednesday in two of our Faculties we are disrupting the agreement.

The University now has double degree programs with Laurier. What are we to say to the business student at Laurier who is taking a double degree with Math? I guess the puritans might say “tough on you, come to the MATH classes and watch your friends who are in business only take the week off.” I don’t think we should put the double-degree students into such an emotional quandary. I bet that many of these students will skip the MATH classes in that week. Thereby the credibility of the appropriate MATH lectures in that week will be tested.

I don’t understand why the Federation of Students has not made an issue of the split Winter timetable. Do the Mathematics students really like having to come for maybe two or three MATH classes while their electives are cancelled? Do some of them just skip school during that week anyway? Do Mathematics and Engineering students really not need a week in February to catch up and refresh?

Waterloo is renowned as a University of hard workers. What I am asking is that students and professors in Mathematics and Engineering be given the opportunity to reenergize in mid-Winter, just like the hard working people in the other four Faculties get.

I hereby propose the following **amendment** to the Motion from Senate Undergraduate Council regarding the calendar dates for 2005-2006.

Amendment

That the calendar dates of the Mathematics and Engineering Faculties during the Winter term of 2006 be made identical to the calendar dates of the other four faculties.

“Content, Connected & Collaboration” ... continued ...
Notes for Report to November 2004 Senate

Mark Haslett
University Librarian

A theme highlighted in Bob Rae’s introduction to the Postsecondary Review “Discussion Paper” is:

There needs to be a much greater capacity for collaboration between institutions

The **Ontario Council of University Libraries (OCUL)**, an affiliate of the Council of Ontario Universities (COU), is an exemplar of this.

Through initiatives such as the **Ontario Scholar’s Portal** (<http://scholarsportal.info/>), OCUL libraries collaborate to provide an Ontario-wide information infrastructure that supports the teaching, learning and research of Ontario faculty and students. (See Update to COU from OCUL: “A Report on the Ontario Scholars Portal, OCUL Business Plan, and the Ontario Digital Library” <http://www.ocul.on.ca/COUupdateDec03.pdf>)

As noted in the recent academic colleagues working paper to COU, “Learning Technology Issues in Higher Education” (September 2004):

Although each Ontario university is likely to find its own unique solutions to many of the LT [learning technology] issues outlined above, there is surely some benefit to **co-operative system-wide ventures**. **Notable is the work of the Ontario Council of University Libraries** with its project on the Ontario Digital Library and the **Ontario Scholar’s Portal** (<http://scholarsportal.info/>)

Ontario University libraries:

- are world-wide leaders in “Best Practice”
- with a track record of cooperation ...
- providing innovative solutions that advance access to scholarly information