### OPEN SESSION

**Consent Agenda**

**Motion:** That Senate approve or receive for information by consent items 1-4 [below].

1. Approval of the April 19, 2010 Minutes [enclosed]  
   - **Decision**

2. Report of the Chair:  
   a. Recognition and Commendation  
   - 2, A1  
   - **Information**

3. Reports from the Faculties (excluding environment)  
   - 2, A2-A13  
   - **Information**

4. Other Business  
   a. Appointments to Committees and Councils  
   - 2, A14  
   - **Decision**
   b. Roster of Graduands  
   - 2, A15  
   - **Decision**

**Regular Agenda**

5. Presentations  
   a. Capital Projects Update  
   - 2, A16  
   - **Information**
   b. Centre for Teaching Excellence  
   - 2, A17-A18  
   - **Information**
   c. Housing/Tutoring Update  
   - 2  
   - **Information**

6. Business Arising from the Minutes

7. Report of the Chair  
   a. Undergraduate Admissions Update  
   - 2  
   - **Information**
   b. Environmental Scan  
   - 2  
   - **Information**

   - 2  
   - **Information**

9. Report of the Vice-President, External Relations  
   - 2  
   - **Information**

10. Report of the Vice-President, University Research  
    - 2  
    - **Information**

11. Reports from Committees and Councils  
    a. Finance Committee  
    - 2, A19-A23  
    - **Decision**
    b. Graduate & Research Council  
    - 2, A24-A69  
    - **Decision/Information**
    c. Undergraduate Council  
    - 2, A70-A98  
    - **Decision/Information**
    d. University Committee on Student Appeals  
    - 2, A99-A101  
    - **Information**

12. Other Business  
    a. Department Name Change  
    - 2, A102  
    - **Decision**

### CONFIDENTIAL SESSION

13. Approval of the April 19, 2010 Minutes [enclosed]  
    - **Decision**

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Lois Claxton  
Secretary of the University  
May 6, 2010
The Executive Committee met on May 3, 2010 and wishes to report as follows:

**OPEN SESSION**

**Consent Agenda**

2. **REPORT OF THE CHAIR**
   Recognition and 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.

4. **OTHER BUSINESS**
   Appointments to Committees and Councils. The committee agreed to recommend these appointments to Senate for approval.

   **Roster of Graduands.** Since the roster of graduands will not be available until after the regular meeting of Senate in May and approval is required before the June meeting, the committee agreed to recommend that Senate delegate approval of the roster to its Executive Committee.

**Regular Agenda**

5. **PRESENTATIONS**
   Capital Projects Update. The vice-president, administration & finance will respond to questions as appropriate.

   Centre for Teaching Excellence. The director of CTE will report.

   Housing/Tutoring Update. The director of university business operations will present this item.

7. **REPORT OF THE CHAIR**
   Undergraduate Admissions Update. The registrar will report as appropriate.

   Environmental Scan. The chair will report as appropriate.

8. **REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST**
   The vice-president will report as appropriate.

9. **REPORT OF THE VICE-PRESIDENT, EXTERNAL RELATIONS**
   The vice-president will report as appropriate.

10. **REPORT OF THE VICE-PRESIDENT, UNIVERSITY RESEARCH**
    The vice-president will report as appropriate.

11. **REPORTS FROM COMMITTEES AND COUNCILS**
    Finance Committee. Recommended to Senate for approval.

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

    Undergraduate Council. The committee agreed to forward this report to Senate for approval and information as indicated.
University Committee on Student Appeals. The committee agreed to forward this report to Senate for information.

12. OTHER BUSINESS

Department Name Change. The committee agreed to recommend this name change to Senate for approval, subject to the Arts Faculty Council approving the change at its meeting on May 11.
FOR INFORMATION

Recognition and Commendation

Janusz Pawliszyn, professor of chemistry, as well as University Professor and Canada Research Chair, is being honoured for his invention of SPME (solid-phase microextraction) with the American Chemical Society’s Separations Science and Technology Award. Pawliszyn will present the award address before the ACS’s Division of Analytical Chemistry. The technique “has revolutionized many areas of sampling and analysis,” says Daniel W. Armstrong, a professor of chemistry at the University of Texas, Arlington. SPME has gained widespread use in flavour and fragrance, food and beverage, and environmental applications. The technique is also increasingly being used in forensics, toxicology, homeland security, and biological applications. “SPME was used to sample the toxic compounds present in the air at ‘ground zero’ at the World Trade Center after the events of 9/11,” Armstrong notes.

A researcher in the Cheriton School of Computer Science, Ming Li, University Professor and Canada Research Chair in Bioinformatics, is the winner of the 2010 Killam Prize in Engineering. Five Killam Prizes are awarded each year to Canadian scholars in the fields of health sciences, natural sciences, engineering, social sciences and humanities. Recipients are chosen by a committee of 15 eminent Canadian scholars appointed by the Canada Council. “These prizes are Canada’s most distinguished annual awards for outstanding career achievements in these fields and are an important part of building Canada’s future through research,” a news release states. The sponsors cited Li as “one of a handful of internationally acclaimed computer scientists whose research has had major impacts outside his own discipline. His work is now finding new applications in computer science, bioinformatics, philosophy, physics, and statistics. Dr. Li’s innovative work in the fields of computer science and bioinformatics has already moved well beyond theoretical investigation into exciting new ways to examine the sequence, structure and function of living cells.”

Waterloo’s team finished in tenth place in this year’s William Lowell Putnam Mathematical Competition, administered by the Mathematical Association of America. The event is held on the first Saturday in December each year. The first-place team for 2009 is the one from the Massachusetts Institute of Technology. Top Canadian team came from the University of Toronto, which was in the fifth-to-ninth-place cohort. Says a memo: “The top three Waterloo students received honourable mention, placing amongst the top 70 of the 4,036 competitors: Steven Karp, Boyu Li, Dong Uk (David) Rhee. The next four were amongst the top 160 competitors: Malcolm Sharpe, Abel Molina-Prieto, Matthew Harrison-Trainor, Manuel Candales. The following students were amongst the top 400 competitors: Ahmad Abdi, Shalev Ben-David, Wei (Will) Ma, Nicholas Ormrod, Yuelin (Julian) Sun, Robert Xiao, Lisa Zhang, Chenglong Zhou.” Karp, Ma and Rhee were identified as members of the official Waterloo team.
A. APPOINTMENTS

Definite-term Reappointment
POSS, Jeff, Assistant Research Professor, Department of Health Studies & Gerontology, April 1, 2010 to December 31, 2010.

Adjunct Appointments
COLE, Donald, Associate Professor, Department of Health Studies & Gerontology, April 1, 2010 to March 31, 2013.

MOCHIZUKI, George, Assistant Professor, Department of Kinesiology, March 1, 2010 to June 30, 2013.

OYAPERO, Babatunde, Lecturer, Department of Recreation & Leisure Studies, May 1, 2010 to August 31, 2010.

TAHA, Ameer, Assistant Professor, Department of Kinesiology, March 1, 2010 to June 30, 2013.

B. ADMINISTRATIVE APPOINTMENTS


McKILLOP, Ian, Executive Director, University Health Research, School of Computer Sciences and Department of Health Studies & Gerontology, July 1, 2009 to December 31, 2010.
FOR INFORMATION

A. APPOINTMENTS

Continuing Lecturers

VAN DE WAAL, Corey (BA University of Waterloo 2004, MA University of Waterloo 2005), Department of Economics, effective May 1, 2010.

VAUGHAN, Mary Ann (BA McMaster University 1977, MA University of Waterloo 1992), Department of Economics, effective May 1, 2010.

Probationary-term Reappointments

DEA, Shannon, Assistant Professor, Department of Philosophy, July 1, 2010 to June 30, 2013.

FRASER, Doreen, Assistant Professor, Department of Philosophy, July 1, 2010 to June 30, 2013.

Adjunct Appointments

BAKER, Gary, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

BRAND, Michael, Lecturer, Department of Anthropology, May 1, 2010 to August 31, 2010.

CHMARA, Harold, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

MESTA, Olivia, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

PAQUETTE, Scott, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

WILDING, Ethan, Lecturer, Department of Philosophy, May 1, 2010 to August 31, 2010.

WU, Jing, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

Adjunct Reappointments

ANDRES, Greg, Lecturer, Department of Philosophy, May 1, 2010 to August 31, 2010.

BALLARD, Sarah, Lecturer, Department of Drama & Speech Communication, May 1, 2010 to August 31, 2010.

BENNETT, Stephen, Lecturer, Department of English Language & Literature, May 1, 2010 to August 31, 2010.

BORONKA, Irina, Lecturer, Department of Germanic & Slavic Studies, May 1, 2010 to August 31, 2010.

BRANIFF, Michele, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

BRIGGS, Catherine, Lecturer, Department of History, May 1, 2010 to August 31, 2010.

CHASMAR, Hugh, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.
DATARDINA, Malik, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

DAVIDSON, Tina, Lecturer, Women’s Studies, May 1, 2010 to August 31, 2010.

DEVITT, Ryan, Lecturer, Department of English Language & Literature, May 1, 2010 to August 31, 2010.

DUCHARME, Robert, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

FATIMA, Nafeez, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

HANNAN, Usman, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

HARRIGAN, Patrick (Distinguished Professor Emeritus), Professor, Department of History, May 1, 2010 to August 31, 2010.

JAKACKI, Diane, Lecturer, Department of English Language & Literature, May 1, 2010 to August 31, 2010.

OLDHAM, Andrew, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

STUMPF, Andrew, Lecturer, Department of Philosophy, May 1, 2010 to August 31, 2010.

TAIT, Sarah, Lecturer, Department of Sociology, May 1, 2010 to August 31, 2010.

THARMALINGAM, Pirapa, Lecturer, Department of Economics, May 1, 2010 to August 31, 2010.

WENSLEY, Karen, Lecturer, School of Accounting & Finance, May 1, 2010 to August 31, 2010.

WESTLEY, Meg, Assistant Professor, Department of Drama & Speech Communication, May 1, 2010 to August 31, 2010.

Cross Appointments
BOYCHUK, Gerard, Associate Professor, Department of Political Science to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.

BYRD, Frederick, Research Professor, Department of Political Science to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.

COOPER, Andrew, Professor, Department of Political Science to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.

CRAIK, A. Neil, Associate Professor, School of Environment, Enterprise & Development to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.

GORMAN, Daniel, Assistant Professor, Departments of History and Political Science to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.

HABIB, Jasmin, Associate Professor, Department of Anthropology to Department of History, January 1, 2010 to December 31, 2014.

KITCHEN, Veronica, Assistant Professor, Department of Political Science to Balsillie School of International Affairs, December 1, 2009 to December 31, 2011.
ROWLANDS, Ian, Professor, Department of Environment & Resource Studies to Balsillie School of International Affairs, January 1, 2010 to December 31, 2011.

MOMANI, Bessma, Associate Professor, Departments of Political Science and History to Balsillie School of International Affairs, January 1, 2010 to December 31, 2011.

Graduate Student to Part-time Lecturer Appointments
BOYD, Nora, Department of Philosophy, May 1, 2010 to August 31, 2010.

CHRISTELIS, Angela, Department of Philosophy, May 1, 2010 to August 31, 2010.

FINN, Tracy, Department of Philosophy, May 1, 2010 to August 31, 2010.

GRISDALE, Christopher, Department of Philosophy, May 1, 2010 to August 31, 2010.

HOCHSTEIN, Eric, Department of Philosophy, May 1, 2010 to August 31, 2010.

HORTON, Christine, Department of English Language & Literature, May 1, 2010 to August 31, 2010.

HOLUKOFF, Kurt, Department of Philosophy, May 1, 2010 to August 31, 2010.

JORDAN, William, Department of Philosophy, May 1, 2010 to August 31, 2010.

LIPNOWSKI, Elliot, Department of Economics, May 1, 2010 to August 31, 2010.

MACDONALD, Kirsten, Department of Philosophy, May 1, 2010 to August 31, 2010.

MCEWAN, Michael, Department of Philosophy, May 1, 2010 to August 31, 2010.

MCKINNON, Rhys, Department of Philosophy, May 1, 2010 to August 31, 2010.

MULVIIHILL, Corey, Department of Philosophy, May 1, 2010 to August 31, 2010.

NELSON, Benjamin, Department of Philosophy, May 1, 2010 to August 31, 2010.

SIMARD SMITH, Paul, Department of Philosophy, May 1, 2010 to August 31, 2010.

STILES, Stefanie, Department of English Language & Literature, May 1, 2010 to August 31, 2010.

B. SABBATICAL (for approval by the Board of Governors)
COLLINS, Karen, Assistant Professor, Department of Drama & Speech Communication, January 1, 2011 to June 30, 2011 at full salary.

Ken S. Coates
Dean, Faculty of Arts
FOR INFORMATION

A. APPOINTMENTS

Probationary-term Appointments

ERENAY, Fatih Safa, Assistant Professor, Department of Management Sciences, January 1, 2011 - June 30, 2014. PhD University of Wisconsin-Madison, WI expected August 2010; MSc Bilkent University, Ankara, Turkey 2006; BS Bilkent University, Ankara, Turkey 2004. Dr. Erenay’s research interests are in production planning, healthcare operations and in stochastic modeling and optimization. His recent research, initiated at the Mayo Clinic, deals with the use of markov decision processes for the purposes of screening patients optimally for colo-rectal cancer. He will be able to teach a broad cross-section of courses in both our undergraduate and graduate programs, and will enhance the base of healthcare-oriented research in the department.

LEE, Hyung-Sool, Assistant Professor, Department of Civil & Environmental Engineering, June 1, 2010 – June 30, 2013. PhD Arizona State University 2009; MEng Inha University, Republic of Korea 2000; BEng Inha University 1998. Dr. Hyung-Sool Lee will join the Environmental and Water Resources Engineering Research Group. His research area is environmental biotechnology with an emphasis on bi-energy production, microbial ecology in engineered biological systems, bioelectrochemistry, fermentation, thermodynamic/kinetic analysis of microbial metabolisms, and bioreduction of oxidized contaminants.

LI, Yuning, Associate Professor, Department of Chemical Engineering, August 1, 2010 – June 30, 2013. PhD Japan Advanced Institute of Science and Technology (JAIST), Japan 1999; MS Dalian University of Technology, China 1988; BS Dalian University of Technology, China 1985. Prior to coming to Waterloo, Dr. Li was a technical leader at the Xerox Research Centre of Canada in Mississauga, Ontario and most recently held the position of Senior Scientist at the Institute of Materials Research and Engineering (IMRE), Agency for Science and Technology and Research, Singapore. He will bring to our department new and complementary strengths in the area of the synthesis of electronic materials with a particular emphasis on organic electronic materials.

Visiting Appointments

BIDAUX, Ludovic, Scholar, Department of Mechanical & Mechatronics Engineering, March 23, 2010 – August 27, 2010.

GAO, Guili, Scholar, Department of Civil & Environmental Engineering, March 22, 2010 – February 28, 2011.

KARBALAEE, Sharbanoo, Scholar, Department of Chemical Engineering, May 1, 2010 – October 31, 2010.

KUMHOM, Thippawan, Scholar, Department of Chemical Engineering, May 1, 2010 – December 31, 2010.

PENG, Liang, Scholar, Department of Civil & Environmental Engineering, March 30, 2010 – March 29, 2011.


WANG, Shiqi, Scholar, Department of Electrical & Computer Engineering, April 1, 2010 – March 31, 2011.

Adjunct Appointments
EL-FOULY, Tarek, Assistant Professor, Department of Electrical & Computer Engineering, April 1, 2010 – March 31, 2011.

EL-GHAZAL, Akrem Saad, Lecturer, Department of Electrical & Computer Engineering, May 1, 2010 – August 31, 2010.

FAHMI, Mohamed, Lecturer, Department of Electrical & Computer Engineering, May 1, 2010 – August 31, 2010.

KEATS, Brian, Lecturer, Department of Electrical & Computer Engineering, May 1, 2010 – August 31, 2010.

POPOVIC, Zoran, Professor, Department of Electrical & Computer Engineering, April 1, 2010 – March 31, 2013.

TARIGHAT, Roohollah, Lecturer, Department of Electrical & Computer Engineering, May 1, 2010 – August 31, 2010.

THOMAS, Mario, Professor, Centre for Business, Entrepreneurship & Technology (CBET), July 1, 2010 – June 30, 2012.

WU, Jonathan, Professor, Department of Systems Design Engineering, March 1, 2010 – February 28, 2013.

Adjunct Reappointments
BLAKE, Clifford, Lecturer, Department of Management Sciences, May 1, 2010 – August 31, 2010


PLUMTREE, Alan (Professor Emeritus), Professor, Department of Mechanical & Mechatronics Engineering, September 1, 2010 – August 31, 2013.

B. ADMINISTRATIVE APPOINTMENT
FENG, Xianshe, Associate Chair, Graduate Studies, Department of Chemical Engineering, July 1, 2010 – June 30, 2012.

ADMINISTRATIVE REAPPOINTMENTS
IOANNIDIS, Mario, Director, Nanotechnology Program, Department of Chemical Engineering,
May 1, 2011 – April 30, 2012.

SPARKES, Douglas, Associate Director, Commercialization & Commercialization Partnerships, Centre for Business, Entrepreneurship & Technology (CBET), May 1, 2010 – April 30, 2011.

C. RESIGNATIONS
ANIS, Mohab, Associate Professor, Department of Electrical & Computer Engineering, May 1, 2010.

LEVESQUE, Moren, Associate Professor, Department of Management Sciences, June 30, 2010.

D. SABBATICALS (for approval by the Board of Governors)
ELKAMEL, Ali, Professor, Department of Chemical Engineering, May 1, 2011 – April 30, 2012, at 85% salary.

EMELKO, Monica, Associate Professor, Department of Civil & Environmental Engineering, July 1, 2011 – December 31, 2011, at 100% salary.

ESMAEILI, Shahrzad, Assistant Professor, Department of Mechanical & Mechatronics Engineering, September 1, 2010 – February 28, 2011, at 100% salary.

FULLER, David, Professor, Department of Management Sciences, January 1, 2011 – June 30, 2011, at 100% salary.

REN, Carolyn, Assistant Professor, Department of Mechanical & Mechatronics Engineering, September 1, 2010 – February 28, 2011, at 85% salary.

RYNNIMERI, Valerio, Associate Professor, School of Architecture, September 1, 2010 – August 31, 2011, at 100% salary.

TAHVILDARI, Ladan, Assistant Professor, Department of Electrical & Computer Engineering, March 1, 2011 – August 31, 2011, at 100% salary.

Adel Sedra
Dean, Faculty of Engineering
FOR INFORMATION

A. APPOINTMENTS

Probationary-term Appointment

HOEY, Jesse (BSc, 1992, McGill University; MSc, 1994; PhD, 2004, both from the University of British Columbia), Assistant Professor, David R. Cheriton School of Computer Science, July 1, 2010 – June 30, 2013. Dr. Jesse Hoey will assist the Cheriton School with both the new Master of Health Informatics professional degree program and in expanding our research activities in the area of health informatics. He spent 2004-2006 as a post-doctoral fellow in a multidisciplinary position between the Department of Computer Science and the Department of Occupational Therapy and Occupational Science at the University of Toronto. Since June 2006, he has been a lecturer (assistant professor) at the University of Dundee (Scotland). Dr. Hoey’s research is in the area of assistive technologies for elderly. In particular, assistive technologies facilitate aging at home, remote monitoring, chronic disease management, decision support and personalized healthcare.

Definite-term Appointment

LUSHMAN, Bradley (BMath, 2000; MMath, 2002; PhD, 2007 all from the University of Waterloo), Lecturer, David R. Cheriton School of Computer Science, September 1, 2010 – August 31, 2011. Dr. Lushman will teach six undergraduate courses (two in Fall ’10 in UAE) and participate in activities of the school.

Visiting Appointments


ELNAGGAR, Michel, Research Associate, Dept. of Applied Mathematics, May 1, 2010 – August 31, 2010.


Adjunct Appointments

PINTO, Suzana, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

Adjunct Reappointments

AIB, Issam, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

BELTAOS, Andrew, Lecturer, Office of the Dean, May 1, 2010 – August 31, 2010.

BEST, Michael (Professor Emeritus), Professor, Dept. of Combinatorics & Optimization, July 1, 2010 – June 30, 2013.

CELMINA, Uldis, Lecturer, Dept. of Combinatorics & Optimization, May 1, 2010 – August 31, 2010.

CHEN, Helen, Professor, David R. Cheriton School of Computer Science, March 1, 2010 – February 29, 2012.

DORRIGIV, Reza, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

KIERSTEAD, Caroline, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

PEI, Martin, Lecturer, Dept. of Combinatorics & Optimization, May 1, 2010 – August 31, 2010.

PETRICK, Mark, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

ROH, Patrick, Lecturer, Dept. of Combinatorics & Optimization, May 1, 2010 – August 31, 2010.

SALEET, Hanan, Lecturer, David R. Cheriton School of Computer Science, May 1, 2010 – August 31, 2010.

SIMPSON, Bruce (Professor Emeritus), Professor, David R. Cheriton School of Computer Science, June 1, 2010 – May 31, 2013.

Cross Appointments
BEDI, Sanjeev, Professor, Dept. of Mechanical Engineering to the David R. Cheriton School of Computer Science, March 1, 2010 – February 29, 2012.

CHILDS, Andrew, Professor, Dept. of Combinatorics & Optimization to the David R. Cheriton School of Computer Science, February 1, 2010 – January 31, 2012.

Graduate Student to Part-time Lecturer Reappointments

GUAY-PAQUET, Mathieu, Dept. of Combinatorics & Optimization, May 1, 2010 – August 31, 2010.


B. ADMINISTRATIVE APPOINTMENTS
GUENIN, Bertrand, Associate Chair of Undergraduate Studies, Dept. of Combinatorics & Optimization, July 1, 2010 – June 30, 2011.

VAVASIS, Stephen, Associate Chair of Graduate Studies, Dept. of Combinatorics & Optimization, September 1, 2010 – August 31, 2011.

ADMINISTRATIVE REAPPOINTMENTS

C. SABBATICALS (for approval by the Board of Governors)
POUPART, Pascal, Associate Professor, David R. Cheriton School of Computer Science, February 1, 2011 – July 31, 2011 with 85% salary.

STINSON, Douglas, Professor, David R. Cheriton School of Computer Science, January 1, 2011 – June 30, 2011 with 100% salary.
TOMAN, David, Associate Professor, David R. Cheriton School of Computer Science, January 1, 2011 – June 30, 2011 with 85% salary.

WILLARD, Ross, Professor, Dept. of Pure Mathematics, July 1, 2010 – December 31, 2010 with 100% salary.

Thomas F. Coleman
Dean
FOR INFORMATION

A. APPOINTMENTS

Probationary-term Reappointments

CUDDINGTON, Kim M.D., Assistant Professor, Department of Biology, July 1, 2011 to June 30, 2014. B.Sc., University of Guelph (1991); M.Sc., University of Calgary (1993); MA, University of Guelph (2001); Ph.D. University of Guelph (1999).

HAWTHORN, David, Assistant Professor, Department of Physics & Astronomy, July 1, 2011 to June 30, 2014. B.Sc., McMaster University (1999); M.Sc., University of Toronto (2000); Ph.D., University of Toronto (2005).

THOMPSON, Russell, Assistant Professor, Department of Physics & Astronomy, July 1, 2011 to June 30, 2014. B.Sc., University of Ottawa (1991); M.Sc., University of Regina (1994); Ph.D., University of Western Ontario (1998).

Adjunct Appointments

DAMIAN, Festo R., Lecturer, School of Pharmacy, April 1, 2010 to August 31, 2010.

KAUR, Tranum, Lecturer, School of Pharmacy, March 15, 2010 to August 31, 2010.

LUMSDEN, John S., Professor, Department of Biology, March 1, 2010 to February 28, 2013.

Adjunct Reappointments

BURGESS, Cliff, Professor, Department of Physics & Astronomy, February 1, 2010 to January 31, 2015.

DEVLIN, J.F. (Rick), Assistant Professor, Department of Earth & Environmental Sciences, April 1, 2010 to March 31, 2013.

FREIDEL, Laurent, Professor, Department of Physics & Astronomy, February 1, 2010 to January 31, 2015.

SHEATH, Robert G., Professor, Department of Biology, May 1, 2010 to April 30, 2013.

Cross Appointment

CHILDS, Andrew MacGregor, Assistant Professor, Department of Combinatorics & Optimization to Department of Physics & Astronomy, March 1, 2010 to February 28, 2013.

Cross Reappointments

EMERSON, Joseph, Assistant Professor, Department of Applied Mathematics to Department of Physics & Astronomy, January 1, 2010 to December 31, 2013.

LAMB, Kevin, Professor, Department of Applied Mathematics to Department of Earth & Environmental Sciences, April 1, 2010 to March 31, 2012.
POULIN, Francis, Assistant Professor, Department of Applied Mathematics to Department of Earth & Environmental Sciences, April 1, 2010 to March 31, 2012.

STASTNA, Marek, Associate Professor, Department of Applied Mathematics to Department of Earth & Environmental Sciences, April 1, 2010 to March 31, 2012.

B. ADMINISTRATIVE APPOINTMENT
MEIERING, Elizabeth, Associate Dean, Graduate Studies Office, January 1, 2011 to December 31, 2014.

ADMINISTRATIVE REAPPOINTMENT
HALL, Roland, Associate Dean, Graduate Studies, Faculty of Science, May 1, 2010 to April 30, 2012.

C. RESIGNATION
LINNEN, Robert, Associate Professor, Department of Earth & Environmental Sciences, effective July 1, 2010.

D. SABBATICAL (for approval by the Board of Governors)
MELKO, Roger, Assistant Professor, Department of Physics & Astronomy, May 1, 2011 to October 31, 2011, 100% salary arrangements.

T.B. McMahon
Dean

TBM/Iw
FOR APPROVAL

Appointments to Committees and Councils

Motion:
That Senate approve the following appointments:

- **Finance Committee**: James Law (Environment & Resource Studies) as graduate student representative, term to April 30, 2011.

- **Graduate & Research Council**: Helen Stubbs (Chemistry) as Science graduate student representative, term to April 30, 2011.

- **Undergraduate Council**: Brian Maloney (History), Fall 2010, and Nilani Logeswaran (Arts & Business), Winter 2011, as Arts undergraduate student representative; Eric Cousineau (Electrical & Computer Engineering), Fall 2010 and Spring 2011, and Alexander Hogeveen Rutter (Electrical & Computer Engineering), Winter 2011, as Engineering undergraduate student representative; Andres Magalhaes (Computer Science), Spring 2011, and Piraveena Tharmalingam (Financial Analysis & Risk Management), Fall 2010, as Mathematics undergraduate student representative.

- **University Committee on Student Appeals**: Zainub Ibrahim (Geography) as graduate student representative, term May 1, 2010 to April 30, 2012.
FOR APPROVAL

Roster of Graduands
Since the roster of graduands will not be available until after the regular meeting of Senate in May and approval is required before the June meeting, the following motion:

Motion:
That Senate delegate such approval to its Executive Committee.
# University of Waterloo
## Capital Projects Update
### May 2010

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Area (GSF)</th>
<th>Construction Start Date</th>
<th>Completion Date</th>
<th>Budget ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantum-Nano</td>
<td>north of Biology 2</td>
<td>284,000</td>
<td>Fall 2007</td>
<td>2011</td>
<td>$160.0</td>
</tr>
<tr>
<td>Engineering 5</td>
<td>Parking Lot B - ECH</td>
<td>176,000</td>
<td>Spring 2008</td>
<td>Spring 2010</td>
<td>$55.0</td>
</tr>
<tr>
<td>North Campus Site Servicing</td>
<td>North-West Campus</td>
<td>na</td>
<td>2010</td>
<td>2012</td>
<td>$9.3</td>
</tr>
<tr>
<td>Engineering 6</td>
<td>Parking Lot B - ECH</td>
<td>111,000</td>
<td>Summer 2009</td>
<td>Spring 2011</td>
<td>$41.4</td>
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<tr>
<td>Mathematics 3 + Renovation</td>
<td>north of Math &amp; Computer</td>
<td>100,000</td>
<td>Fall 2009</td>
<td>Spring 2011</td>
<td>$23.0</td>
</tr>
<tr>
<td>Environment 3</td>
<td>north &amp; above of EV 2</td>
<td>57,000</td>
<td>Fall 2009</td>
<td>Spring 2011</td>
<td>$20.2</td>
</tr>
<tr>
<td>Health Services Addition + Reno</td>
<td>west of existing building</td>
<td>20,000</td>
<td>2011</td>
<td>2012/13</td>
<td>$7.8</td>
</tr>
<tr>
<td>Stratford Campus</td>
<td>St. Patrick Street parking lot</td>
<td>tbd</td>
<td>Fall 2010</td>
<td>2012/13</td>
<td>$20.0</td>
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</table>

D. Huber
FOR INFORMATION

Centre for Teaching Excellence (CTE)

Introduction
The Centre for Teaching Excellence (CTE) was launched in May 2007 and has a mandate of assisting Waterloo’s academic community members to improve their teaching and make learning more effective. CTE currently employs 12 full-time staff, 3 part-time staff, 3-4 graduate students per term, and 2-3 undergraduate Co-op students per term. This report provides an overview of CTE’s recent accomplishments, current challenges, and upcoming initiatives.

Recent Accomplishments
- **Support of curriculum initiatives** – As of April 2010, CTE’s curriculum support has reached close to half of Waterloo’s academic departments and programs at the undergraduate level since 2007, with a dozen departmental retreats in 2009 and some new work Faculty-wide. Our involvement has included facilitating curriculum mapping retreats, consulting on the development of program and course learning outcomes, clarifying the undergraduate degree level expectations (UDLEs) for program reviews, helping to prepare for outcomes-based accreditation requirements, and assisting with stakeholder data collection. Given the increasing demand for this support and the adoption of degree level expectations for graduate programs, we recently received approval to hire a second instructional developer to assist with this important work.

- **Teaching and learning events for faculty members** – We offered 45 workshops to faculty members this past year on topics related to emerging technologies, blended learning, teaching development, and research methodologies and tools. We also provided more intensive workshops – the *Instructional Skills Workshop* on class planning and delivery and the *Teaching Excellence Academy* on course redesign. Our support for new faculty members also continued, in conjunction with WatPort. As well, we organized two major annual events: the *Learning about Teaching Symposium* that brings an external speaker and facilitator to campus and the *Opportunities and New Directions (OND) conference* that focuses on the scholarship of teaching and learning. The OND event also led to a publication, released at this April’s second conference.

- **Support for external teaching awards** – CTE staff members provided consultations and/or support letters for Waterloo’s two OCUFA and 3M teaching award winners this past year: Gordon Stubley and Alan Morgan.

- **Networks with off-campus colleagues** – CTE staff have initiated the sharing of resources with teaching centre staff at nearby institutions to promote synergies and efficiencies.

- **Completion of CTE strategic plans** – We engaged in our first-ever planning activities which resulted in a vision statement, mission statement, guiding principles, and goals for all staff members. We created these plans collaboratively and have benchmarks against which to measure our future success. We also mapped our goals to the Sixth Decade Plan to check for alignment.
Current Challenges

- **Staffing** – As the demand for CTE’s various services continues to grow, our current staffing cannot easily meet this demand. For example, while we have positions to support the exploration and pedagogical use of existing and emerging instructional technologies, the usage of these technologies exceeds our current staffing, particularly our Faculty Liaisons.

- **Space** – CTE has two main offices on campus: in the Dana Porter Library and the Math and Computer building. Our Faculty Liaisons have offices out in the Faculties. Having two locations limits our abilities to maximize efficiencies and synergies amongst our staff members. CTE could benefit from having one main central office, which would include training space for hands-on workshops.

- **Budget** – CTE continues to experience budgetary challenges related to soft money positions and an uncertain operating budget.

Future Opportunities

- **Contract training opportunity** – We have successfully negotiated a 2-week training program that will see up to 25 faculty members from King Saud University coming to Waterloo in July 2010 to learn more about teaching, learning, and technology from CTE staff members.

- **Graduate student programming** – We continued to have success with our Certificate in University Teaching (CUT) program (another 31 completed the CUT last year) and our relatively new International Teaching Assistant (ITA) training (16 completions last year). We are investigating a possible addition to our programming that would add introductory teaching assistant training to parallel our ITA training, which would provide more centralized training to graduate students and better reserve the CUT for doctoral students interested in an academic career.

- **Collaborative partnerships** – This past year, we enhanced our working relationships with various other Waterloo departments, such as the Centre for Extended Learning, Instructional Technologies and Multimedia Services, the Library, Waterloo International, WatCACE, and Institutional Analysis and Planning. Previous connections had existed, but we continue to find new and better ways to work together. We have also continued to meet with Chairs and Directors to learn how best to assist them. We would like to see a teaching mentor or chair identified in each department, or Faculty, with whom we could liaise to help increase teaching development support across campus, particularly for new faculty members. We are collaborating with faculty members as well on a blended learning survey to assess students’ responses to various instructional methods and plan to have results to release within the next year.

For more information about CTE’s various services and a staff listing, please visit our website at: cte.uwaterloo.ca or contact Donna Ellis, Interim Director, at donnae@uwaterloo.ca
FOR APPROVAL

As a result of the provincial budget released on March 25, 2010, the university was required to make changes to the 2010/11 Operating Budget considered by Senate on March 22, 2010.

On May 3, 2010, the committee considered the revised, proposed 2010/11 Operating Budget (attached), and agreed to ask Senate to pass a motion to recommend that the Board give favourable consideration to the 2010/11 Operating Budget.

/rw

David Johnston
Chair
## UNIVERSITY OF WATERLOO

### 2010/11 Operating Income Budget

<table>
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<tr>
<th>Income Category</th>
<th>2009/10 Base $000</th>
<th>Estimated 10/11 % Increase</th>
<th>Estimated 10/11 $000 Increase</th>
<th>2010/11 Base $000</th>
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### NOTES TO 2010/11 OPERATING INCOME

[1] The final $602K was rolled into the basic grant in 2009/10.
[2] The allocation is based on projected Fall 2010 FTE growth over the Fall 2007 FTE base and the projected system total funds available from the Ministry of Training, Colleges and Universities (MTCU).
[3] The allocation is based on MTCU having provided full funding for growth to 2009/10 and Waterloo's estimated share of the $102M growth funding for 2010/11.
[4] This fund was originally allocated on a one-time basis and is now ongoing funding, with offsetting expenses.
[5] Tuition rate increases were applied in accordance with MTCU guidelines. Rate increases vary by program and year-level. Year one rates in Arts & Science increased by 4.5% and in professional programs by 8%. The rate for continuing students increased by 4%. International rates increased by 3%.
[6] Domestic and international tuition rates increased by 3%.
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<th>2010/11</th>
<th>2010/11</th>
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</tr>
<tr>
<td>Total income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated income over expenses before expenditure reduction</td>
<td></td>
<td></td>
<td></td>
<td>(4,979)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less expenditure reduction at 2%</td>
<td></td>
<td></td>
<td></td>
<td>5,593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excess</td>
<td></td>
<td></td>
<td></td>
<td>614</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTES TO THE 2010/11 OPERATING EXPENSE BUDGET

[1] This increase covers previously made commitments to fund new faculty positions.

[2] This budget model is based on PTR and merit increases only, for faculty and staff.

[3] Benefit cost increase includes both premium rate changes and additional costs associated with salary increases.

[4] Graduate course based masters (CBM) income sharing was introduced in 2009/10. This fund shares the tuition revenue from participating course based masters programs with the faculties.

[5] The ongoing income sharing balances represent additional amounts available in 2010/11 for distribution. Income sharing for existing programs is allocated to the faculties on a slip-year basis. Funding for new programs is allocated on a calendar-year basis. New graduate growth allocations were introduced in 2006/07 to recognize growth in intake and overall FTEs. The slip-year undergraduate funds have significant increases in 2010/11 as a result of the 2009/10 growth. The ongoing cumulative income sharing amounts, including additional amounts for 2010/11, from inception to date, are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differential tuition</td>
<td>$13,736</td>
</tr>
<tr>
<td>Graduate expansion (ended 2004/05)</td>
<td>2,727</td>
</tr>
<tr>
<td>Graduate growth (started 2005/06)</td>
<td>8,851</td>
</tr>
<tr>
<td>Graduate international growth</td>
<td>1,131</td>
</tr>
<tr>
<td>Undergraduate enrolment expansion</td>
<td>29,332</td>
</tr>
<tr>
<td>International tuition</td>
<td>19,142</td>
</tr>
<tr>
<td>Graduate course based masters</td>
<td>2,186</td>
</tr>
<tr>
<td>Total</td>
<td>$77,105</td>
</tr>
</tbody>
</table>

To accommodate growth, academic support units receive supplemental budget increases.

[6] Utilities increase includes campus growth as well as rate increases.

[7] Increase in supplies and expenses includes the following: an allocation of $7.0M for emerging programs; $1.5M to cover endowment investment shortfall; $1.2M for maintenance of new buildings; $1.0M for academic support improvements; $ .8M for clinical education funding; and $1.7M of other income sharing and miscellaneous items.

[8] A 2% expenditure reduction applies to approximately 65% of the operating budget and is allocated across all academic and academic support units resulting in a savings of $5.6M.
Senate Graduate & Research Council met on April 12 and May 10, 2010 and Senate Undergraduate Council met on April 13 and May 11, 2010 and jointly agreed to forward the Guidelines for Reviews of Ongoing and New Academic Programs at the University of Waterloo to Senate for approval. Note that the additional items submitted for information, as indicated, originate from Senate Graduate & Research Council alone.

Further details are available at: wwwadm.uwaterloo.ca infosec/Committees/senate/sgrc.htm

FOR APPROVAL

GUIDELINES FOR REVIEWS OF ONGOING AND NEW ACADEMIC PROGRAMS AT THE UNIVERSITY OF WATERLOO

Motion: To approve the revised guideline framework as detailed below and in Attachment #1.

Background: Universities in Ontario are in the process of updating their academic review processes. In the past, undergraduate academic reviews have occurred within the universities subject to audit by the Undergraduate Program Review Audit Committee (UPRAC). All reviews of both new and existing graduate programs have occurred at the Ontario Council for Graduate Studies (OCGS). In the future, it is proposed that all existing programs (undergraduate and graduate) will be reviewed within the universities, subject to audit by the Ontario Universities Council on Quality Assurance (the Quality Council). It is expected that new programs (both undergraduate and graduate) will be reviewed by the Quality Council.

All universities are drafting an Institutional Quality Assurance Process document (IQAP). These documents will be reviewed by the Quality Council in 2010/11, and are expected to take effect in July 2011. During the academic year 2010/11, OCGS will not be undertaking reviews of existing graduate programs.

The document in Attachment #1 is Waterloo’s IQAP. It updates the existing undergraduate review process (as approved by Senate February 1997) and adds a similar process for existing graduate programs. These procedures can be used in academic year 2010/11. There are also sections proposing a method for review of new programs. These sections (Section G, and Appendix 5) are presented for information only. Likewise the Schedule of Reviews (Appendix B) has traditionally come to Senate annually for information.

It is anticipated that the entire document will come to Senate for approval in academic year 2010/11 for implementation in 2011/12; there may, however, be some further changes. Nevertheless, it is important to have a framework in place for academic reviews for existing programs for 2010/11.
FOR INFORMATION

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

- Curricular matters for the faculties of:
  - **Applied Health Sciences** (course reactivation – REC 600; kinesiology field of specialization or area of research name change *from* psychomotor behaviour *to* neuroscience; removal of the recreation and leisure studies PhD requirement of “at least one course in each of the three areas of study [administration and management of services, leisure behaviour and cultural studies, and recreation and leisure resources]” from the degree requirements in the graduate calendar and from the graduate application form effective September 2011; removal of the following statement from the graduate calendar under the section recreation and leisure studies, Doctor of Philosophy, PhD comprehensive examination, “If the examination is failed it may be retaken once, and it must be retaken within three months of the first examination” effective January 2010; plan inactivations: (1) health studies and gerontology collaborative PhD program in behavioural and cognitive neuroscience effective September 2010 and (2) kinesiology collaborative PhD program in behavioural and cognitive neuroscience effective September 2010);
  - **Arts** (program/course revisions – CLAS 600, 601, PSYCH 610A, 610B, 614A; new courses – CLAS 632, 636, PSYCH 614B, 620, 638; course inactivation – CLAS 658; new fields – Global Social Governance); and
  - **Environment** (new courses GEOG 651 and GEOG 676; course revision GEOG 641).

- Two new awards: IQC Entrance Award – Operating; IQC Achievement Award – Operating.
- One new fellowship: Ontario Graduate Fellowship - Endowments.

Council received the following for information:

- Harry Zimmerman Memorial Scholarship in GWC² – University of Guelph-managed endowment.
- Withdrawal of the University of Waterloo’s PhD program in pharmacy, and reducing the master’s program in pharmacy from three fields to two (pharmaceutics, and drug design; withdrawing pharmacy practice).

--/rah

George Dixon
Vice-President, University Research

Sue Horton
Associate Provost, Graduate Studies

Geoff McBoyle
Associate Vice-President, Academic
GUIDELINES FOR
REVIEWS OF ONGOING AND NEW ACADEMIC PROGRAMS
AT THE
UNIVERSITY OF WATERLOO

Effective September 1, 2010

Office of the Associate Vice President Academic
And Graduate Studies Office
University of Waterloo
Waterloo, Ontario N2L 3G1

May 7, 2010
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A. Purpose and Scope of Reviews

Consistent with good educational practice, the University of Waterloo regularly reviews its academic programs. The current guidelines are consistent with recommendations of the Ontario Universities Council on Quality Assurance (the Quality Council), and are effective July 1 2011. The new guidelines replace the previous ones, namely guidelines for undergraduate programs (originally approved by Senate February 1997), and those for graduate programs (the Ontario Council for Graduate Studies – OCGS – guidelines originally implemented in 1982).

The review processes are subject to regular audit by the Quality Council. The threshold framework for degree expectations are the UW Guidelines for University Undergraduate Degree Level Expectations (UUDLES: adopted by Senate 2008), and the UW Guidelines for University Graduate Degree Level Expectations (adopted by Senate 2010). These in turn conform to the OCAV Guidelines for Degree Level Expectations (adopted by OCAV in 2005: Appendix 1).

In addition to the UUDLEs, the University of Waterloo intends its graduating students at the Bachelor’s level to be able to articulate their learning from experiential or applied opportunities, and to demonstrate an understanding of the intellectual, social, cultural, and political diversity of the world in which we live.

The OCAV framework for degree expectations, together with the University of Waterloo enhancements, will support departments and academic units in planning or revising curricula and in communicating program goals and outcomes to students and stakeholders. As of July 2011, departments and faculties engaged in program review shall use these guidelines as base expectations while retaining the flexibility to add objectives unique to their specialties.

The Quality Council Framework (2010) defines a program as “(a)n identified set and sequence of courses, and/or other units of study, research and practice within an area of disciplinary or interdisciplinary study, which is completed in full or partial fulfilment of the requirements for the awarding of a degree, and is recorded on the graduate’s academic record”. Programs are not necessarily congruent with academic organizational units, and provision should be made to include joint programs and multi- or inter-disciplinary programs in a way appropriate for the institution. (Note that while University of Waterloo student information system often uses the term “plan” to refer to a program, the term “program” will be used throughout this document to avoid confusion).

Following the Quality Council Framework (2010), the scope of academic reviews at University of Waterloo covers “new and continuing undergraduate and graduate degree/diploma programs whether offered in full, in part, or conjointly by any institutions federated and affiliated with the university.” This also extends “to programs offered in partnership, collaboration or other such arrangement with other postsecondary institutions including colleges, universities, or institutes, including Institutes of Technology and Advanced Learning…”

At UW, the fundamental purposes of the review process are to help (1) each program to achieve and maintain the highest possible standards of academic excellence, through systematically reflecting on its strengths and weaknesses, and looking forward to determine what
actions would further enhance quality in the program; (2) assess the quality of the program relative to counterpart programs in Ontario, Canada and internationally, and (3) meet public accountability expectations through a credible, transparent, and action-oriented review process.

Another key purpose is to create an institutional culture which understands and values the benefits of program reviews, while recognizing the significant workload implications of preparing a Self Study, hosting a site visit, and providing a Two-year Progress Report.

At the University of Waterloo, the responsibility for undergraduate academic reviews rests with the position of Associate Vice President Academic, created in 1998. The responsibility for graduate academic reviews rests with the Associate Provost, Graduate Studies. Policy since 1998 has been that: (1) the reviews would be treated as “whole of Program reviews”, in the belief that undergraduate and graduate programs should be considered together, (2) Interdisciplinary Programs are reviewed under the same arrangement as for single-discipline reviews except for the composition of the Review Committee, and (3) review processes for professional accreditation would be examined to determine if they met the UW and the Quality Council requirements for a Program Review. The design of the Program Review process is intended to be as streamlined as possible, while ensuring its accessibility and transparency to the UW community.

At the University of Waterloo, many students complete their degrees in the Faculty rather than in a Department or School. Faculty-based programs are treated similarly to Department or unit-based reviews.

A schedule for Undergraduate Program Reviews based on a seven year cycle is being used, and has been organized to place undergraduate program reviews in the same year as, or one year before or after, the scheduled Graduate Program Reviews, in order to allow information from one review to be used in the other review. Units are also encouraged where desired and appropriate to undertake combined undergraduate and graduate reviews (i.e. augmented reviews). However, it also is recognized that accreditation for professional programs more often occurs on a five year cycle. In the latter case, the UW schedule of reviews has been modified to allow the UW Program Review to occur simultaneously with the professional accreditation review. The schedule for Undergraduate and Graduate Program Reviews 2010/11 to 2016/17 can be found in Appendix 2. Units are encouraged to combine reviews of undergraduate and graduate programs, and may do so by moving the dates for review, subject to the interval between reviews of individual programs not exceeding eight years.

The Self Study process is started during the preceding academic year with a joint meeting called by the Associate Vice President Academic – AVPA - (undergraduate reviews) and the Associate Provost Graduate Studies – APGS - (graduate reviews). The AVPA and APGS meet with the chairs/directors and administrative assistants of the Programs scheduled to submit their Self Study the following June, so that the Site Visit could be scheduled for either the following fall or winter terms (Appendix 3). In cases where the academic unit chooses to submit an augmented review, either the AVPA or APGS is assigned primary responsibility for overseeing the particular review (allocation is made in such a way as to share workload appropriately). At the first meeting, the nature of the review process is discussed, and opportunity is provided for
questions. After that first meeting, the AVPA/APGS is available to meet with faculty and staff in each Program beginning its Self Study, to discuss matters particular to that Program.

The following Sections outline the expectations for Program Reviews, and indicate how the University of Waterloo deals with them. Throughout the UW guidelines, summaries/explanations/suggestions are written in italics.

B. Reviews of Existing Academic Programs not related to Professional Accreditation

The Quality Council Framework (2010) specifies the key elements for the institutional Quality Assurance Process. These are identified below, followed by the UW approach to each. After discussing the basic process, information is provided regarding the processes for the Self Study and Site Visits.

According to the Quality Council, the institutional review policy should:

(1) identify an authority responsible for application of the policy (*UW*: responsibility allocated to the AVPA for undergraduate reviews, and APGS for graduate ones).

(2) define the unit to be reviewed, i.e., which program or programs will be covered (*UW*: outlined in the Guidelines for Self Study for Academic Department/School/Program Reviews in the Appendices).

(3) include a self-appraisal by professors, staff and students participating in the program (*UW*: each Program prepares a reflective, self-critical and analytical Self Study. The guidelines for those reports are provided in the Appendices).

(4) have an evaluation, including a site visit by at least two external reviewers including one from universities outside Ontario. One internal reviewer is also mandated, from outside the discipline under review (*UW*: each Site Visit involves two external reviewers, at arm's length [not collaborators, supervisors or supervisees, relatives, etc.] from the program under review, normally with one from a university in Ontario and one from a university from outside Ontario). Each Site Visit Team also involves one internal UW reviewer, chosen from a different Faculty than the one in which the program under review is located). Guidelines for Site Visits are provided below.

(5) describe the process of assessment of the Self Study and review within the university, and describe how a Final Assessment Report will be drafted, including an implementation plan for recommendations. (*UW*: the Program Chair/Director, in collaboration with the Faculty Dean, submits a Chair/Director's Report to the AVPA/APGS, indicating actions to be taken as a result of what has been learned from the Self Study and the Site Visit. Two years after the entire review process is complete, a Two-year Progress Report is
submitted to the AVPA/APGS in which progress is documented regarding actions taken by the Program, the Faculty and the University. Both the Final Assessment Report and the Two-year Progress Report are commented on and evaluated by Senate Undergraduate Council (undergraduate reviews) or Senate Graduate and Research Council (graduate reviews). Any comments and/or concerns raised by Senate Undergraduate Council/Senate Graduate and Research Council, together with the program’s response, will be incorporated into the Final Assessment Report or the Two-year Progress Report prior to it being presented to Senate. The AVPA/APGS subsequently reports to Senate, and provides a one-page summary for all programs which the Provost uses for reporting to the Board. At the time of the next Program Review, the Program is accountable for commitments made in response to the previous Program Review).

(6) describe reporting requirements *(UW: the Final Assessment Report is presented at Senate, and hence available publicly on the web in the Senate Minutes; a copy is also sent to the Quality Council. Similarly the Two-year Progress Report is presented to Senate and hence available publicly in the Senate Minutes).*

(7) Provide an institutional manual *(UW: this document).*

**The Quality Council Evaluation Criteria**

The curricular content, admission requirements, mode of delivery, bases of evaluation of student performance, commitment of resources and overall quality of any program and its courses are all necessarily related to its goals, learning objectives and learning outcomes. Goals provide an overview for students, instructors and program/course evaluators of what the program or course aims to accomplish. Learning objectives are an expression of what the instructor(s) intends that the student should have learned or achieved by the end of the program or course. Learning outcomes are what the student has actually learned or achieved in the program or course.

The Quality Assurance Framework (2010) specifies that the review of programs should at a minimum cover the following areas (see Quality Council, 2010, for more detailed explanation):

(1) **Objectives**
- Consistency of the program with the institution’s mission and academic plans;
- Clarity and appropriateness of the program’s requirements and associated learning objectives in addressing the Degree-Level expectations;
- Appropriateness of degree nomenclature;

(2) **Admission requirements**
- Appropriateness of admission requirements for the learning objectives established for those completing the program;
• Sufficient explanation of alternative requirements, if any, such as minimum grade point average, additional languages or portfolios, along with how the program recognizes prior work or learning experience;

(3) appropriateness of the program’s **structure** and curriculum to meet its learning objectives and degree-level expectations;

(4) appropriateness of program **content**;

(5) appropriateness and effectiveness of the **mode of delivery** (including where applicable, distance or online delivery) to meet the program’s learning objectives and degree expectations;

(6) appropriateness of the methods used for **assessment** of student progress;

(7) appropriateness and effectiveness of the utilization of the existing human/physical/financial **resources**, and participation of a sufficient number and quality of faculty;

(8) for **graduate** programs, sufficient **resources** in terms of faculty expertise, financial support for students (where appropriate to the program) and availability of supervision;

(9) for **undergraduate** programs, sufficient **resources** in terms of faculty, staff, supervision of experiential learning opportunities (if required).

The guidelines at UW for the Self Study (Appendix 4) have been arranged to reflect the points identified by the Quality Council Framework. The UW guidelines note major headings involving self assessment, of the past and the future, the organization and the people involved, research, service, teaching (with special attention to co-operative education and online learning), the students and the support available (human, physical and financial).

The UW guidelines are broad in scope, so that each Program can emphasize those aspects which are most relevant. The review will cover the last seven fiscal years (spring/fall/winter), with emphasis on the last several. The UW Department of Institutional Analysis and Planning (IAP) will provide much of the historical data to each Program.

Under each heading in the UW guidelines are suggested areas that could be discussed and critically examined. In some cases, a topic may fit just as well under another heading. It is not necessary to repeat information in several sections, and generally it will be up to the Program to decide where information should be included in the Self Study.

All component parts of the self-appraisal process should be **reflective and searching**. In the Self Study, attention should be given to (1) describing and (2) explaining core features which contribute to academic excellence, (3) evaluating the effectiveness of initiatives to achieve academic excellence, (4) demonstrating that graduates meet degree level expectations, (5)
articulating the relationship of the learning objectives/outcomes to the degree expectations and
(6) prescribing additional initiatives to enhance quality.

Key characteristics of the Self Study include: identification of core features of the
Program; balanced and critical review of strengths and weaknesses; systematic representation of
different perspectives (faculty, staff, students, alumni, employers); intended learning objectives
and outcomes at both the program and course level; demonstrated achievement of expectations
by graduates; what the Program aspires to become; and if information is available where it sits
relative to counterpart programs in Ontario, Canada and internationally.

All faculty members should be provided the opportunity to participate in the self-
appraisal process and to comment on the Self Study. Faculty from the UW Colleges and part-
time faculty who regularly teach in the program are to be given this opportunity. If there are
differing views among the faculty these should be noted. Also all faculty members should have
the opportunity to participate in the program’s response to the Review Team Report. Again the
response should note differing views if there is no consensus among faculty. It is also very
desirable to include staff and student participation in the self-appraisal process, and to inform
staff and students (for example at a Town Hall meeting) of the Review Team’s findings.

Guidelines for Site Visits

The following guidelines have been prepared to assist Departments/Schools in making
arrangements for the Site Visit related to their Program Reviews.

The Program under review will have the lead role in making arrangements for the
schedule for the Site Visit. However, arrangements should be prepared in consultation with the
Office of the AVPA or the Graduate Studies Office as appropriate. For augmented reviews
(reviews combining both undergraduate and graduate offices), one Office will be assigned
primary responsibility, and consultation with the other will occur as needed. Contact the relevant
Administrative Assistant.

The schedule for the Site Visit should be prepared at least one month in advance of the
visit, so that the Review Team can see the schedule, and have an opportunity to suggest changes.

1. Prior to the Site Visit

1.1 The Chair/Director of the Program under review arranges for completion of a Self
Study with input from the Dean, faculty members, staff and students, and in
consultation with the Dean of the Faculty, develops a proposed list of reviewers
(including phone numbers and email addresses and a brief biography) which is
submitted to the AVPA/APGS. Two External Reviewers and one Internal Reviewer
are required. Five names should be proposed, and ranked in order of preference, for
each of (1) an External Reviewer who will normally come from a university in
Ontario; (2) an External Reviewer who will normally come from a university outside Ontario but at the undergraduate level usually within Canada. One External Reviewer may be a non-university appointee (e.g. someone from government or the private sector), provided that she/he has appropriate qualifications to fulfill the Reviewer role. An Internal Reviewer, who will come from UW but from outside the home Faculty, will be selected by the AVPA/APGS.

1.2 The proposed Reviewers should be at arm’s length from the program, meaning not relatives, collaborators, supervisors/supervisees, etc. The AVPA/APGS will make the final choice of members for the Review Team.

1.3 The Chair/Director identifies several two-day blocks suitable to the Program under review for the Site Visit, and provides those to the AVPA/APGS.

1.4 The Office of the AVPA/Graduate Studies Office contacts the proposed External and Internal Reviewers, to invite them to serve as Reviewers.

1.5 The Office of the AVPA/Graduate Studies Office confirms the time and arrangements for the Site Visit with the Reviewers, and obtains the Social Insurance Numbers from the External Reviewers.

1.6 The Office of the AVPA/Graduate Studies Office co-ordinates arrangements for travel and accommodation for the External Reviewers.

2. The Site Visit

2.1 The External Reviewers arrive by not later than the evening before the Site Visit activities are to begin.

2.2 An initial meeting with the AVPA/APGS is held at the start of the visit. The AVPA typically hosts a meeting on the evening before the Site Visit activities begin, for the two External Reviewers and the Internal Reviewer, as well as the Undergraduate Chair/Director of the Program under review and the Dean of the Faculty (or his or her delegate) in which the Program is based. The APGS similarly has an initial meeting with Reviewers at the beginning of the site visit. The purpose of the meeting is to review the purposes of the Program Review, discuss the schedule and activities during the next two days, identify any further information needs for the Review Team, confirm logistical arrangements for the visit, and review the process for preparing the report from the Review Team. In addition, it provides the opportunity to identify issues for which suggestions from the Review Team would be helpful regarding the Program.

2.3 The Review Team will have two days to meet with key participants in the Program under review. The Chair/Director should make arrangements for the Review Team to meet at a minimum with the:

2.3.1 Dean and Associate Dean(s) (subject to availability) relevant to the Program under review.

2.3.2 Chair/Director and Associate Chairs.

2.3.3 Faculty (including adjuncts and Federated University and Affiliated University Colleges’ faculty where applicable), in groups, or, if feasible, individuals when that is requested.
2.3.4 Staff.
2.3.5 The relevant Librarian.
2.3.6 Department of Co-operative Education and Career Services (if there is a Co-op stream).
2.3.7 Undergraduate students (recommended more than one time slot be identified for undergraduates to ensure that adequate opportunity is provided to meet with the Review Team). These meetings should be arranged without faculty present, to facilitate frank and open discussion. It is good practice to ask the Departmental/School Undergraduate Student Association (where one exists) to invite students to participate in this meeting.
2.3.8 Graduate students, with particular attention to ensuring Teaching Assistants are well represented. As with the undergraduates, these meetings should be arranged without faculty present, and it is good practice to ask the Departmental/School Graduate Student Association (where one exists) to invite students to participate in this meeting.
2.3.9 Vice President Academic and Provost (subject to his/her availability).
2.3.10 Graduate reviews will conclude with a second meeting with the Associate Provost Graduate Studies; undergraduate reviews will include the Associate Vice President Academic.
2.4 If possible, the Review Team should be provided by the Program under review with an office in which the Reviewers can leave their belongings, and have discussions among themselves.
2.5 The host Program should discuss with the Review Team if, over lunch periods, the Review Team would like to be by itself, in order to discuss what has been learned, or whether it would appreciate the opportunity to meet with other people.
2.6 The Program should allocate time in the evening after the first day of the Site Visit, and in the latter part of the second day, for the Review Team members to discuss among themselves what they have been learning, how they will structure their report, and how they will divide the tasks for writing the report. UW expects that the Review Team will submit its report within two weeks of the Site Visit. Thus, the Review Team members must be given sufficient time to make arrangements for the preparation of the report before they finish the Site Visit and depart from UW.


3.1 The Review Team will prepare a report with separate sections for each program (undergraduate and graduate) evaluated, which should be submitted to the University of Waterloo within two weeks of the completion of the Site Visit. There is no fixed format for the report, provided that it covers the evaluation criteria identified in the Quality Council (2010) Framework, and summarized above. It is recommended that the report should include at least the following:

Executive Summary: brief summary of findings and all recommendations, which can be made available publicly

Part 1: The Review Process
Part 2: Findings, Conclusions and Recommendations

In preparing its report, the Review Team should be aware that the Quality Council (2010) Framework specifies that a review of Programs should address the following points:

- **time of visit.**
- **documents reviewed.**
- **individuals and groups met.**
- **adequacy of Site Visit arrangements.**

- consistency of the program with the general objectives of the institution’s mission and development plan and with the standards, educational goals and learning objectives/outcomes of the degree, so that graduates may demonstrate achievement of its degree level expectations.
- appropriateness of the admission requirements, e.g., achievement and preparation, for the educational objectives of the institution and the program.
- appropriateness of the program’s structure and curriculum for its educational objectives.
- appropriateness of the mode of delivery and the methods used for the evaluation of student progress.
- appropriate utilization of the existing human/physical/financial resources.
- appropriateness of the Department’s or School’s self assessment relative to other departments/schools, provincially, nationally and internationally.
- the effectiveness of the Department or School in meeting its Program goals.
- strengths and weaknesses of the Department or School, with special regard to its: (1) monitoring and judging effectiveness of teaching; (2) assuring quality in the educational experience offered to students; (3) undergraduate and graduate plans; (4) distance and continuing education; (5) demonstrating that graduates achieve the degree level expectations; (6) research and creative activity; and (7) professional service and community outreach.
- quality of faculty (qualifications, research and scholarly record).
- students: applications and registrations, attrition rates, average time-to-completion, graduation rates, academic awards.
- graduates: post-graduation employment and admission to further study, alumni reports on program quality.
- for graduate programs: evidence that time-to-completion is consistent with regard to the program’s defined length; quality of graduate supervision, critical mass of students and faculty sufficient to sustain the program intellectually, and sufficient
graduate courses that students can take two-thirds of their courses at this level.

- recommendations for the future.

The suggested points to be included in the Review Team Report were prepared with regard to the Quality Council (2010) Framework. However, the Review Team is welcome to add other topics, or to use another structure for its report as long as attention is given to the points highlighted above.

3.2 The most useful report for UW will be one which is “constructively critical”, identifying strengths which should be protected and enhanced, weaknesses that deserve attention, and new opportunities. When weaknesses are identified, the report will be more helpful if suggestions are presented regarding how the weaknesses could be addressed.

3.3 The Review Team Report will lose credibility within UW if it is perceived primarily to be a “booster report” for a discipline or profession, and only recommends providing more funding to the Program. A more helpful report will consider what could be done by the Program, by itself or in collaboration with its Faculty and UW, in using limited resources more efficiently and effectively, along with considering where new resources would represent a strategic investment to allow a Program to grow with quality.

3.4 The Review Team Report, if necessary, may include a confidential letter of transmittal to cover personnel issues. This letter would only be available to the Dean, AVPA/APGS, and the Vice President Academic and Provost.

4 After the Site Visit

4.1 The Review Team Report is submitted to the AVPA/APGS, and then copies are distributed to the Vice President Academic and Provost, the Dean of the Faculty, and the Chair/Director of the Program.

4.2 The external Review Team members submit their travel and accommodation expense claims to the Office of the Associate Vice President Academic/Office of Graduate Studies. The honoraria for the External Reviewers will be paid after the final report from the Review Team has been received.

4.3 The Program under review is invited to provide comments, verbally or in writing, regarding the experience with the Site Visit, and especially to identify aspects of the Site Visit which could be modified to make the experience more productive. It is important that students also have an opportunity to provide comments related to the Site Visit. Such comments should be sent to the AVPA/APGS.

4.4 The Chair/Director and the faculty members of the Department/School have an opportunity to provide comments on factual errors in the Review Team Report. Comments should be sent to the AVPA/APGS within four weeks of receiving a copy of the Report. If no comments are received within that time period, unless other
arrangements have been made it will be concluded that the Program has no initial comments to make about the Report.

4.5 The Chair/Director, in consultation with the Faculty Dean, will submit a report to the AVPA/APGS outlining what was learned through the Self Study and the Review Team Report. The Chair’s/Director’s Report should be submitted within 10 weeks of the Program receiving its copy of the Review Team Report. The other documents (Self Study, Review Team Report, Chair/Director’s Report) are however not public documents.

4.6 The AVPA/APGS will provide a Final Assessment Report to the Vice President Academic and Provost, outlining the nature of the review process, the main findings, conclusions and recommendations from the Review Team Report, and the main conclusions and proposed actions proposed by the Program. This report will be submitted within four weeks of receiving the Chair’s/Director’s Report described in 4.5 above. The Final Assessment Report will be presented to Senate Undergraduate Council/Senate Graduate and Research Council for approval.

4.7 The AVPA/APGS will report to Senate that the Program Review has been completed, and highlight main findings and conclusions. The Provost will report to the Board once a year as to which programs were reviewed the previous academic year. The Final Assessment Report referred to in Section 4.6 above is made available publicly in the Minutes of Senate.

4.8 The Vice President Academic and Provost, or designate, will have responsibility for ensuring that all recommendations and issues arising from the reviews are dealt with in a manner that brings closure to the process.

4.9 It is good practice for the Chair/Director to arrange a town hall meeting with staff and students to provide feedback on the review findings.

4.10 The Chair/Director is responsible for a Two-year Progress Report which is presented to Senate Undergraduate Council/Senate Graduate and Research Council (for approval) and Senate (for information), on steps taken to follow up from the Review.

C. Reviews of Existing Academic Programs Relative to Professional Accreditation

The Quality Council (2010) Framework (section 4.2.7) states that “The Institutional Quality Assurance Process may allow for and specify the substitution or addition of documents or processes associated with the accreditation of a program, for components of the institutional program review process, when it is fully consistent with the requirements established in this framework. A record of substitution or addition, and the grounds on which it was made, will be eligible for audit by the Quality Council.”

The AVPA/APGS as relevant reviews the guidelines for the accreditation process, meets with the person(s) at UW responsible for the professional accreditation together with the Director of the Program, to review the guidelines for the accreditation and UW reviews, and to determine what additional information, if any, is required for the UW review. Such discussions occur at the time when work begins by a Program to prepare for the accreditation process, and a memo is filed determining the decision taken. If necessary, the Program under review will be asked to
provide supplemental information to meet the needs of the UW review process.

When the Review Team is appointed by an accreditation organization, UW will seek to have a UW faculty member included as a member of the Review Team. If this is not possible, then UW may arrange to have a UW faculty member conduct interviews and examine documents related to the UW program review process to provide his or her perspective, and prepare a written report to supplement the accreditation Review Team Report. For master’s programs which are subject to accreditation reviews, it is usually necessary to review the research components of the program. These aspects can be reviewed in conjunction with a review of the PhD program (if one exists) or research master’s in the same unit (if one exists). If the only graduate program in the unit is a professional master’s subject to accreditation, then a separate review of the research components is required.

**D. Combined Reviews of Undergraduate and Graduate Programs**

UW encourages combined reviews (augmented reviews). Augmented reviews can be more efficient and also have academic merit, since there are frequently interactions between the undergraduate and graduate programs. Academic units proposing an augmented review should indicate their intention to the AVPA/APGS in good time (prior to the end of the previous calendar year). The AVPA/APGS will then allocate one of their two Offices as having primary responsibility for the logistics of the review. The review will then follow the normal process appropriate to that Office. Augmented reviews will be presented both at Senate Undergraduate and Senate Graduate and Research Councils. The Chair/Director will be invited to both meetings to respond to questions, the AVPA will be invited to Senate Graduate and Research Council, and the APGS to Senate Undergraduate Council, to ensure coherence in the response to the reviews of the undergraduate and graduate components.

**E. Reviews of Multi- or Inter-disciplinary Programs**

The previous UPRAC Review and Audit Guidelines (COU, 2006: 3.5) specify that “the review of undergraduate, interdisciplinary and multidisciplinary programs, however they are managed, must be clearly shown to have effectively considered such programs as entities distinct from the larger academic units within which they may be included.”

Reviews of interdisciplinary programs which lead to a degree should follow the same procedures as those for single discipline programs described above. The review of an interdisciplinary program (including collaborative graduate programs) can be, where appropriate, combined with the review of a larger program. One of the considerations in such combined reviews is whether a Review Team can be assembled which has expertise in both disciplinary and interdisciplinary programs. Separate report sections must also be written for each program.

Where the interdisciplinary undergraduate program does not lead to a separate degree (for example undergraduate options), the composition of the Review Committee is different. The Committee is composed of two University of Waterloo faculty members and one external reviewer. The Director of the interdisciplinary program and the Dean who provide oversight of the program will be invited to suggest individuals to serve on the review committee. The composition of the review committee will be determined by the AVPA.
The process of the Review follows the same arrangement as for single-discipline reviews.

F. Reviews Involving Programs at the Federated or Affiliated Institutions

The revised UPRAC Review and Audit Guidelines (COU, 2006: 3) stipulate that the "institution granting a degree is responsible for ensuring the quality of all components of programs of study, including those offered: i) in full or in part by its federated and affiliated institution, and ii) in partnership with other higher education institutions (colleges and universities) through collaborative or other affiliation agreements."

The University of Waterloo has one Federated University (St. Jerome’s) and three Affiliated University Colleges (Conrad Grebel, Renison, St. Paul’s). UW has made arrangements with the colleges to ensure that Program reviews are completed in a coordinated manner. Two major considerations are being addressed. First, when a Program is primarily based within one of the colleges, the lead role for the Program review is taken by the College, with the Self Study submitted to the Associate Vice President Academic at UW. Second, during their Program reviews, academic departments at UW are directed to identify when there are complementary disciplinary or program activities at one or more of the Colleges, to ensure that such activities are considered in the Self Study.

The Colleges may opt to have the program reviews considered at the relevant College Council, in parallel to consideration at Senate Undergraduate Council/Senate Graduate and Research Council.

G. Reviews of New Programs

FOR INFORMATION ONLY: REMAINS TO BE FINALIZED

At University of Waterloo, reviews of new programs follow a similar procedure to reviews of existing programs, with appropriate modifications to the program proposal documentation and the external review (for example, there are no current students to interview or for whom to provide statistics).

For new undergraduate programs, the AVPA has responsibility for the review, while for new graduate programs it is the APGS. Appendix 5 describes in more detail the procedures for preparing the proposal. Appendix 5 also sets out what is defined as a new program, and how the procedure varies according to the scope of change envisaged (i.e., what is required for a completely new program, what is required for a significant change to an existing program, what is required for a new field of a graduate program, what is required for a new collaborative graduate program, etc.).

All new programs will be evaluated using the same criteria as existing programs, as described in Section B above (section headed: OUQCA Evaluation criteria).
The steps for approval for new programs are laid out in detail in Appendix 5. The steps are similar to those for review of current programs.

1. An initial proposal document is developed, addressing the topics outlined in the Quality Council criteria. This proposal goes to the appropriate Department/School and Faculty committees for discussion and approval. If the program includes co-op experience, a report from Co-op and Career Services is required.

2. If an external consultant review with site visit is required, this occurs following Faculty approval, and the unit concerned has the opportunity to respond to the review comments.

3. The proposal (modified if appropriate following the review) then goes to either Senate Undergraduate Council, or Senate Graduate and Research Council, and then Senate, for approval.

4. At this point the proposal is sent to the Quality Council for approval, if approval is required (minor changes do not require review).

5. The Board receives information once a year about programs approved to commence in the previous year (along with information on completed reviews of existing programs).

6. If MTCU approval of funding is required, a submission is made to MTCU.

7. As is the case for reviews of existing programs, a Two-year Progress Report is required also for new programs. The purpose of the Two-year Progress Report is to provide initial data on student progress and implementation of the program, and to respond to any issues raised by consultants. Copies of the Two-Year Progress Report are sent to the Quality Council for information (or, if required, for decision).

8. Thereafter the program enters into the regular review cycle.

H. Reviews of Programs Joint with other Universities

For programs offered jointly with other Ontario universities, the procedure is that one individual (normally the Director or equivalent of the joint program) will prepare a Self Study following the template of his/her university, in consultation with faculty, staff and students at both institutions. The review visit will include both campuses. The response to the review can be written by the Director of the joint program in consultation with the appropriate Chairs and Deans at both participating institutions, and then sent through the regular process at both universities. If deemed more appropriate, two separate responses could be prepared, one for each participating institution, to follow the normal process at each university.

For programs joint with other universities outside Ontario, UW will follow the review process for Ontario universities. This would not necessarily require a site visit to the other university, provided that the Quality Council has determined that the partner university is also subject to an appropriate quality review process in its own jurisdiction. However UW would
obtain information about the components of the program completed outside Ontario as appropriate, and include this in the review within Ontario.

If, in future, UW develops partnerships to offer degree or diploma programs with other institutions such as colleges or institutes, these guidelines will be modified to include such programs.

I. Reviews of For-Credit Diploma and Certificate Programs

Diplomas and certificates, where offered for credit, are reviewed on the same cycle as other programs. They will usually be reviewed in conjunction with a related degree program.

J. References


### APPENDIX 1: Ontario Council of Academic Vice Presidents’ (OCAV) Undergraduate and Graduate Degree-Level Expectations

<table>
<thead>
<tr>
<th>Depth and Breadth of Knowledge</th>
<th>Baccalaureate/Bachelor’s Degree</th>
<th>Baccalaureate/Bachelor’s Degree: Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This degree is awarded to students who have demonstrated:</td>
<td>This degree is awarded to students who have demonstrated:</td>
</tr>
<tr>
<td>1.</td>
<td>a) a general knowledge and understanding of many key concepts, methodologies, theoretical approaches and assumptions in a discipline</td>
<td>a) a developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in a discipline overall, as well as in a specialized area of a discipline</td>
</tr>
<tr>
<td></td>
<td>b) a broad understanding of some of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines</td>
<td>b) a developed understanding of many of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines</td>
</tr>
<tr>
<td></td>
<td>c) an ability to gather, review, evaluate and interpret information relevant to one or more of the major fields in a discipline</td>
<td>c) a developed ability to: i) gather, review, evaluate and interpret information; and ii) compare the merits of alternate hypotheses or creative options, relevant to one or more of the major fields in a discipline</td>
</tr>
<tr>
<td></td>
<td>d) some detailed knowledge in an area of the discipline</td>
<td>d) a developed, detailed knowledge of and experience in research in an area of the discipline</td>
</tr>
<tr>
<td></td>
<td>e) critical thinking and analytical skills inside and outside the discipline</td>
<td>e) developed critical thinking and analytical skills inside and outside the discipline</td>
</tr>
<tr>
<td></td>
<td>f) the ability to apply learning from one or more areas outside the discipline</td>
<td>f) the ability to apply learning from one or more areas outside the discipline</td>
</tr>
</tbody>
</table>

### Knowledge of Methodologies

2. ... an understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:

- evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques; and
- devise and sustain arguments or solve problems using these methods.

### Application of Knowledge

3. a) the ability to review, present, and interpret quantitative and qualitative

... an understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:

- evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques;
- devise and sustain arguments or solve problems using these methods; and

describe and comment upon particular aspects of current research or equivalent advanced scholarship.

a) the ability to review, present and critically evaluate qualitative and quantitative
<table>
<thead>
<tr>
<th>4. Communication Skills</th>
<th>... the ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing to a range of audiences.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Awareness of Limits of Knowledge</td>
<td>... an understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.</td>
</tr>
</tbody>
</table>
| 6. Autonomy and Professional Capacity | a) qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring:  
  • the exercise of personal responsibility and decision-making;  
  • working effectively with others;  
  b) the ability to manage their own learning in changing circumstances, both within and outside the discipline and to select an appropriate program of further study; and  
  c) behaviour consistent with academic integrity and social responsibility. |
<table>
<thead>
<tr>
<th>Master's Degree</th>
<th>Doctoral Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>This degree is awarded to students who have demonstrated the following:</td>
<td>This degree extends the skills associated with the master’s degree and is awarded to students who have demonstrated the following:</td>
</tr>
</tbody>
</table>

### 1. Depth and breadth of knowledge

<table>
<thead>
<tr>
<th>Master's Degree</th>
<th>Doctoral Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A systematic understanding of knowledge, including, where appropriate, relevant knowledge outside the field and/or discipline, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice;</td>
<td>A thorough understanding of a substantial body of knowledge that is at the forefront of their academic discipline or area of professional practice including, where appropriate, relevant knowledge outside the field and/or discipline.</td>
</tr>
</tbody>
</table>

### 2. Research and scholarship

<table>
<thead>
<tr>
<th>Master's Degree</th>
<th>Doctoral Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A conceptual understanding and methodological competence that a) Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; b) Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and c) Enables a treatment of complex issues and judgments based on established principles and techniques; and,</td>
<td>a) The ability to conceptualize, design, and implement research for the generation of new knowledge, applications, or understanding at the forefront of the discipline, and to adjust the research design or methodology in the light of unforeseen problems; b) The ability to make informed judgments on complex issues in specialist fields, sometimes requiring new methods; and c) The ability to produce original research, or other advanced scholarship, of a quality to satisfy peer review, and to merit publication.</td>
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</table>

On the basis of that competence, has shown at least one of the following:

<table>
<thead>
<tr>
<th>Master's Degree</th>
<th>Doctoral Degree</th>
</tr>
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<tbody>
<tr>
<td>a) The development and support of a sustained argument in written form; or b) Originality in the application of knowledge.</td>
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<tr>
<td>3. Level of application of knowledge</td>
<td>Master's Degree</td>
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<td>-------------------------------------</td>
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</tr>
<tr>
<td>Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.</td>
<td>This degree is awarded to students who have demonstrated the following:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Professional capacity/autonomy</th>
<th>The qualities and transferable skills necessary for employment requiring:</th>
<th>a) The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex situations;</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) The exercise of initiative and of personal responsibility and accountability; and</td>
<td>b) Decision-making in complex situations;</td>
<td>b) The intellectual independence to be academically and professionally engaged and current;</td>
</tr>
<tr>
<td>b) Decision-making in complex situations;</td>
<td>c) The intellectual independence required for continuing professional development;</td>
<td>c) The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and</td>
</tr>
<tr>
<td>c) The intellectual independence required for continuing professional development;</td>
<td>d) The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and</td>
<td>d) The ability to evaluate the broader implications of applying knowledge to particular contexts.</td>
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<tr>
<td>d) The ability to appreciate the broader implications of applying knowledge to particular contexts.</td>
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<thead>
<tr>
<th>5. Level of communications skills</th>
<th>The ability to communicate ideas, issues and conclusions clearly.</th>
<th>The ability to communicate complex and/or ambiguous ideas, issues and conclusions clearly and effectively.</th>
</tr>
</thead>
</table>

| 6. Awareness of limits of knowledge | Cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines. | An appreciation of the limitations of one's own work and discipline, of the complexity of knowledge, and of the potential contributions of other interpretations, methods, and disciplines. |
APPENDIX 2: Schedule of Program Reviews (2010/11 to 2016/17)

University of Waterloo

January 2010

FOR INFORMATION
<table>
<thead>
<tr>
<th>Program Descriptor</th>
<th>Last Undergrad Review</th>
<th>Proposed Date for Self Study Submission for Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied Health Sciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Studies &amp; Gerontology (BSc, MSc, MPH, PhD)</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Kinesiology (BSc, MSc, PhD)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Recreation &amp; Leisure Studies, Recreation &amp; Business Management (BA, MA, PhD)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Work and Health (collaborative PhD)</td>
<td>Began 2007</td>
<td></td>
</tr>
<tr>
<td>Ageing, Health and Well-being (collaborative PhD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Descriptor</td>
<td>Last Undergrad Review</td>
<td>Proposed Date for Self Study Submission for Next Review</td>
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<tr>
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<tr>
<td></td>
<td></td>
<td>MTax</td>
</tr>
<tr>
<td><strong>Arts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting &amp; Financial Management (BAFM, MTax, GDip, MAcc, PhD), Computing &amp; Financial Management (^1) (joint with Computer Science), Biotechnology/Chartered Accountancy (joint with Biology)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Anthropology (BA, MA)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Applied Language Studies + Applied Language Studies Option (BA)</td>
<td>--</td>
<td></td>
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<tr>
<td>Classical Studies (BA: MA Ancient joint with WLU), Medieval Studies(^*)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Cognitive Science (^*)</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Drama (BA)</td>
<td>July 2002</td>
<td></td>
</tr>
<tr>
<td>East Asian Studies (^*)</td>
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<td></td>
</tr>
<tr>
<td>Economics (BA, MA) + Environment and Economics (^*), Biotechnology/Economics (joint with Biology)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>English Language and Literature (BA 3MAs, PhD)</td>
<td>July 2002</td>
<td></td>
</tr>
<tr>
<td>Fine Arts + Fine and Performing Arts (^*) (BA MFA)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>French Studies (UG, MA, PhD)</td>
<td>July 2004</td>
<td></td>
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<tr>
<td>Geography (see Environment)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Germanic and Slavic Studies (BA, MA, PhD) + Russian and East European Studies (BA, MA)</td>
<td>July 2007</td>
<td></td>
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<tr>
<td>Global Business and Digital Arts (Sept 2010)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Global Governance (MA; PhD joint with WLU)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Joint program with Computer Science.

\(^*\) Joint program with Computer Science.

\(^\) Indicates the proposed period for self-study submission for the next review.
<table>
<thead>
<tr>
<th>Program Descriptor</th>
<th>Last Undergrad Review</th>
<th>Proposed Date for Self Study Submission for Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arts (cont’d)</strong></td>
<td></td>
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</tr>
<tr>
<td>History (BA; MA, PhD joint with Guelph, WLU)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Human Resources Management *</td>
<td>July 2001</td>
<td></td>
</tr>
<tr>
<td>Independent Studies (BIS)</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>International Studies *</td>
<td>July 2000</td>
<td></td>
</tr>
<tr>
<td>Italian Studies (BA)</td>
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<tr>
<td>Jewish Studies *</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Legal Studies + Legal Studies and Criminology *</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Liberal Studies (BA)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Management Studies *</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mennonite Studies *</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Music + Church Music and Worship *, Music and Business (BA)</td>
<td>July 2006</td>
<td></td>
</tr>
<tr>
<td>Peace and Conflict Studies (BA)</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Philosophy (BA, MA, PhD); GCert Cognitive Science</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Political Science (BA, MA)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Psychology (BA, BSc with Psychology in Science) (MA, MASC, PhD)</td>
<td>July 2002</td>
<td></td>
</tr>
<tr>
<td>Religious Studies + Spirituality and Personal Development *; PhD (joint with WLU)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Sexuality, Marriage and Family Studies (BA)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Social Development Studies (BA)</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Sociology (BA, MA, PhD); Sociology (Survey Methodology) (MA)</td>
<td>July 2006</td>
<td></td>
</tr>
<tr>
<td>Spanish and Latin American Studies (BA)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Speech Communication (BA)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Women’s Studies (BA)</td>
<td>July 2006</td>
<td></td>
</tr>
<tr>
<td>Program Descriptor</td>
<td>Last Undergrad Review</td>
<td>Proposed Date for Self Study Submission for Next Review</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architecture (BArch, BAS, MArch)</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Society, Technology and Values *</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Business, Entrepreneurship and Technology (MBET, GDip)</td>
<td>July 2011</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering (BASc, MASc, MEng, PhD)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Civil and Environmental Engineering (BASc, MASc, MEng, PhD; MEng infrastructure due 2014)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering, Computer Engineering (BASc, MASc, MEng, GCert X 4, GDip, PhD)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Geological Engineering (BASc: joint with Earth and Environmental Sciences)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Management Engineering (BASc)</td>
<td>July 2015</td>
<td></td>
</tr>
<tr>
<td>Management Sciences (undergrad option, MASc, MMSc, PhD; Management of Technology MMSc)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering (BASc, GCert X 3, MASc, MEng, PhD; CONGESE (MASc/MMath) to be submitted by Western in 2013)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Mechatronics Engineering (BASc)</td>
<td>July 2016</td>
<td></td>
</tr>
<tr>
<td>Nanotechnology Engineering (joint with Chemistry) (BASc) Nanotechnology Collaborative (MSc, MASc, PhD) (joint with Science)</td>
<td>July 2016</td>
<td></td>
</tr>
<tr>
<td>Quantum Information Collaborative (MASc, MMath, MSc, PhD) joint with Science, Math</td>
<td>July 2016</td>
<td></td>
</tr>
<tr>
<td>Software Engineering (joint with Computer Science) BSE</td>
<td>July 2016</td>
<td></td>
</tr>
<tr>
<td>Systems Design Engineering (BASc, MASc, MEng, PhD)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Program Descriptor</td>
<td>Last Undergrad Review</td>
<td>Proposed Date for Self Study Submission for Next Review</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment and Business (BES, MEB)</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Environment and Resource Studies (BES, MES)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Geography (BA, BES, MA, MSc, MES, PhD)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>Geography and Environmental Management, Geomatics, Geography and Aviation (BES)</td>
<td>July 2007</td>
<td></td>
</tr>
<tr>
<td>International Development (BES)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Knowledge Integration (BKI)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Local Economic Development (MAES)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Planning ² (BES, MA, MES, MAES, PhD)</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Tourism Policy &amp; Planning collaborative MA/MES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A52
<table>
<thead>
<tr>
<th>Program Descriptor</th>
<th>Last Undergrad Review</th>
<th>Proposed Date for Self Study Submission for Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial Science (BMath, MActSc)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Applied Mathematics + Applied Mathematics Earth Sciences Option (BMath, MMath, PhD)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Bioinformatics ¹ (joint with Biology)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Biology &amp; Bioinformatics ¹ (joint with Biology)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Business Admin &amp; Computer Science ¹ (joint with WLU) (Sept 2010) (BBA/BCS)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Combinatorics and Optimization, Operations Research (BMath, MMath, PhD)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Computational Mathematics (BMath, MMath)</td>
<td>July 2001</td>
<td></td>
</tr>
<tr>
<td>General Mathematics (BMath)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mathematics Business Administration ¹ (joint with WLU) (BMath/BBA)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mathematics / Information Technology Management (BMath)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Mathematical Finance ¹ (joint with Pure Math and Statistics) Quantitative Finance (MQF)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Mathematical Physics ¹ (joint with Physics and Astronomy)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mathematics/Chartered Accountancy ¹ (joint with Accounting and Finance)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mathematics / Financial Analysis and Risk Management (BMath)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Mathematics / Teaching Option</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Mathematical Studies</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Pure Mathematics BMath, MMath, PhD</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Scientific Computation / Applied Mathematics (BMath)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Statistics (BMath); Statistics and Actuarial Science (MMath, PhD)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Program Descriptor</td>
<td>Last Undergrad Review</td>
<td>Proposed Date for Self Study Submission for Next Review</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology (BSc, MSc, PhD), Biochemistry (joint with Chemistry), Biomedical Sciences, Environmental Sciences/Ecology, Bioinformatics (joint with Mathematics)</td>
<td>July 2009</td>
<td></td>
</tr>
<tr>
<td>Biotechnology/Chartered Accountancy (joint with Accounting and Finance)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Biotechnology/Economics (joint with Economics)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Chemistry (BSc); (MSc, PhD joint with Guelph), Biochemistry (joint with Biology), Chemical Physics (joint with Physics and Astronomy), Geochemistry (joint with Earth and Environmental Sciences)</td>
<td>July 2008</td>
<td></td>
</tr>
<tr>
<td>Computational Science (BSc)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Earth and Environmental Sciences (BSc, MSc, PhD), Geochemistry (joint with Chemistry)</td>
<td>July 2004</td>
<td></td>
</tr>
<tr>
<td>Honours and General Science (BSc)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Honours Science and Arts Major (BSc)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Optometry (OD, MSc, PhD)</td>
<td>July 2002</td>
<td></td>
</tr>
<tr>
<td>Pharmacy (BScPhm, MSc, PhD)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Physics and Astronomy (BSc), Chemical Physics (joint with Chemistry), Mathematical Physics (joint with Math) undergraduate; Physics (MSc, PhD) joint with Guelph</td>
<td>July 2005</td>
<td></td>
</tr>
<tr>
<td>Psychology (joint with Psychology in Arts)</td>
<td>July 2002</td>
<td></td>
</tr>
<tr>
<td>Quantum Information Collaborative (MSc, MMath, MSc, PhD) joint with Math, Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Aviation (BSc)</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Science and Business (BSc)</td>
<td>July 2003</td>
<td></td>
</tr>
<tr>
<td>Program Descriptor</td>
<td>Last Undergrad Review</td>
<td>Proposed Date for Self Study Submission for Next Review</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Other Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conrad Grebel University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theological Studies (MTS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renison University College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Work (BSW)</td>
<td></td>
<td>July 2006</td>
</tr>
<tr>
<td>St Jerome's University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic Thought (MCT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centre for Theoretical Neuroscience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDip</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* inter-disciplinary undergraduate offerings;
+ XXX* the inter-disciplinary offering XXX will be reviewed with the program to which it is attached;
1 these undergraduate plans will be reviewed by each department/school.
2 U/G program review will occur at the same time as the accreditation
3 All certificates from non-academic units will be reviewed as a group with one external reviewer and one internal
   ▲ Graduate Review
   ◆ Undergraduate review
Appendix 3: Timelines for Review Process

Table A3a: Current programs

<table>
<thead>
<tr>
<th>Fall, previous academic year</th>
<th>Meeting of those responsible in Department/School, with AVPA, APGS and resource persons; final decision as to whether review will be augmented or only undergraduate/only graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>Self Study submitted</td>
</tr>
<tr>
<td>Fall/winter</td>
<td>Site Visit occurs</td>
</tr>
<tr>
<td>2 weeks after visit</td>
<td>Review Team submits Report</td>
</tr>
<tr>
<td>4 weeks after Review Team Report received</td>
<td>Chair/Director submits comments on factual errors/issues in Review Team Report to AVPA/APGS</td>
</tr>
<tr>
<td>10 weeks after Review Team Report received</td>
<td>Chair/Director’s Report submitted on what was learned from Self Study and Review Team Report, and plans for future</td>
</tr>
<tr>
<td>4 weeks after Chair/Director’s Report received</td>
<td>AVPA/APGS submits Final Assessment Report to Senate Undergraduate Council/Senate Graduate and Research Council for approval, and then to Senate for information. Copy of Final Assessment Report sent to the Quality Council.</td>
</tr>
<tr>
<td>February of subsequent academic year</td>
<td>Provost reports to Board names of all programs reviewed in previous academic year cycle</td>
</tr>
<tr>
<td>Two years after Site Visit</td>
<td>Two-year Progress Report submitted by Department/School to Senate Undergraduate Council/Senate Graduate and Research Council for approval, and Senate for information</td>
</tr>
</tbody>
</table>

Table A3b: New programs/Major changes to current programs*

<table>
<thead>
<tr>
<th>Month 1</th>
<th>Approval by Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 2</td>
<td>Approval by Faculty</td>
</tr>
<tr>
<td></td>
<td>- Co-op report commissioned</td>
</tr>
<tr>
<td></td>
<td>- Library report commissioned</td>
</tr>
<tr>
<td></td>
<td>- List of consultants sent to GSO/Office of AVPA</td>
</tr>
<tr>
<td></td>
<td>- Proposal brief prepared for consultants (allow 1 month for consultants to read document)</td>
</tr>
<tr>
<td>Month 5-6</td>
<td>Consultant site visit; Review Report received within 2 weeks Chair/Director ensures consultation and implementation of any changes recommended by consultants; submits revised brief</td>
</tr>
<tr>
<td>Month 6-7</td>
<td>Approval by Senate Undergraduate Council/Senate Graduate and Research Council</td>
</tr>
<tr>
<td>Month 7-8</td>
<td>Approval by Senate; advertizing permitted with qualification “subject to approval by the Quality Council”</td>
</tr>
<tr>
<td>Month 10</td>
<td>Approval by the Quality Council</td>
</tr>
<tr>
<td>Month 10</td>
<td>Submission to MTCU, if required</td>
</tr>
<tr>
<td>Two years after Site Visit</td>
<td>Two-year Progress Report submitted, as for current programs</td>
</tr>
</tbody>
</table>
*Note that not all new programs require consultant visits (for example, graduate collaborative programs and undergraduate minors and options); if so, timeline will be shorter: otherwise these represent the minimum time required
APPENDIX 4: Guidelines for Self Study Reports

*Required for undergraduate reviews only
**Required for graduate reviews only

Note that separate sections of the Self Study are required for undergraduate programs and graduate programs: information does not however need to be repeated (refer back to data provided in a previous section as appropriate).

1. Background
1.1 Brief listing of programs offered: degrees offered; when program started; features e.g. collaborative programs, offered in different locations.
1.2 Program goals: explain goals and their relationship to Faculty’s/University’s degree expectations, with reference to degree expectations and learning objectives.
1.3 Fields in the program: indicate any recent changes.**
1.4 Assessment relative to other departments or programs provincially/nationally/internationally as appropriate.
1.5 Previous Program Reviews: any concerns expressed in previous appraisal, and action taken
1.6 Process used to prepare Self Study: including role of students, faculty (full-time and part-time), alumni, staff, and employers (for co-op programs).
1.7 Special matters and innovative features: e.g. accreditation; role of Research Chairs; special research equipment, etc.

2 Human Resources
2.1 Administrative organization of the unit, with reporting structures, including support staff.
2.2 List of faculty by field: full-time faculty (change since last review), vacant positions, impact of lost positions (if any), normal retirement dates of faculty, commitment to replacement of retirements (if any), cross-appointments from other units, adjunct faculty, clinical faculty.
2.3 External research funding of faculty (past seven years, by source (Table 2 from OCGS template); also by field (Table 2a, OCGS template)**.
2.4 Graduate supervision: completed and current, master’s, doctoral and post-doctoral students, by faculty member (Table 3, OCGS template).**
2.5 Current teaching assignments by faculty member, showing number of courses, enrolments and administrative assignments (Table 4, OCGS template). Note that for graduate reviews, enrolments are needed for graduate classes; for undergraduate reviews, undergraduate enrolments, and augmented reviews require both.
2.6 Teaching evaluations for undergraduate courses, with comparison to the Faculty average.*
2.7 Support staff.
2.7.1 Number and type of staff.
2.7.2 Change in staff complement over time.
2.7.3 Profile of complement positions.
2.7.4 Age and normal retirement date of staff: impact on program administration.
3 Physical and Financial Resources
3.1 Library resources: provided by library.
3.2 Laboratory facilities.
3.3 Computer facilities.
3.4 Space.
3.5 Financial support of graduate students** (Table 5, 5a OCGS template).
3.6 Financial support of undergraduate students*: scholarships, teaching and research assistantships.
3.7 Other external sources of funding for the program.*

4 Teaching
4.1 The intellectual development and educational experience for the student, related to degree outcomes and program learning objectives. Suggested topics for coverage include:
4.1.1 Learning community **: departmental seminars, workshops on professionalization for students, opportunities for students to present their own research;
4.1.2 Internationalization and student exchanges;*
4.1.3 Co-operation with other programs, with interdisciplinary programs, service teaching;*
4.1.4 Student advising;*
4.1.5 Co-op: experiential education is one of the defining features of UW, particularly at the undergraduate level but also in some graduate programs: a meeting should be held with the program’s representative in the Department of Co-operative Education and Career Services;
4.1.6 Distance education (Extended learning) (where applicable); and
4.1.7 Continuing education (where applicable): programs offered, relationship of curriculum to department goals, enrolment patterns, indicators of teaching and program quality.
4.2 Graduate program regulations** (admission standards; degree requirements; progress reports for students primarily focusing on research; thesis evaluation procedures; language requirements).
4.3 Part-time studies: if program differs for part-time students, describe how delivery differs.
4.4 Courses offered (listing): for graduate courses**, it is required to state whether enrolment is restricted to graduate students, or also open to undergraduates, and whether there is any policy restricting the number of undergraduate courses or mixed undergraduate/graduate enrolment courses which can be taken as part of a graduate program. Table 7** (OCGS template) for graduate courses offered in past three years, with enrolments.

5 Student Outcomes
5.1 Undergraduate:*
5.1.1 For both regular and co-op streams of an undergraduate program; the applicant numbers, the first year enrolment numbers, attrition/retention rates, co-op employment rates by work term, employer evaluation of co-op students, co-op evaluation of employers, value of work term reports, graduation patterns, final year academic grades, and student employment after graduation. (Note that information on student employment should not be given by name due to FIPPA regulations);
5.1.2 Academic quality of students accepted into programs: appropriateness of admission requirements (as related to learning outcomes); source of students (e.g. Ontario, other provinces, international, transfers and mature students);
5.1.3 Entrance scholarships, student scholarships in upper years;
5.1.4 Evaluation of students with respect to intended learning outcomes; and
5.1.5 Student employment after graduation, and continued education.

5.2 Graduate** (master’s, doctoral, certificates/diplomas separately):
5.2.1 Academic quality of students accepted into the program, appropriateness of admission requirements (as related to learning outcomes), source of students (e.g. Ontario, other provinces, international, transfers and mature students, enrolments) and graduations, attrition/retention rates, time to graduate, Tables 8, 9, 10 and 11 of OCGS template (cohort analysis), entrance scholarships, student publications, student employment after graduation, projected graduate intake and enrolments etc. (Note that information on student employment cannot be given with the students’ name due to FIPPA regulations);
5.2.2 Student publications**: proportion of graduates from doctoral and research-oriented master’s programs with at least one publication (excludes abstracts) emanating from their graduate work; and
5.2.3 Projected graduate intake and enrolments**: were plans for past seven years fulfilled: describe targets for next seven years, and reasons for significant growth/decline in numbers.

6 Professional and Community Service of faculty members, related to discipline or professional activities*
6.1 Service to professional or disciplinary associations, such as elected officer, journal editor, associate editor, number of editorial boards.
6.2 Service as invited reviewers or committee members for national and international research competitions.
6.3 Service to other programs or research centres at UW or elsewhere.
6.4 Connection between service and teaching: e.g. service learning.
6.5 Other aspects of service.

7 Topics on which advice is requested
Issues on which Department/School desires advice: programs are encouraged to include up to five issues on which advice would be useful.
APPENDIX 5: Procedures for Establishing New Programs and major modifications of existing programs

FOR INFORMATION ONLY: WILL BE SUBMITTED FOR APPROVAL IN 2010/11

New Program:
A New Program is defined as a set of courses leading towards a degree, degree program, program of specialization, diploma, or certificate approved by Senate or equivalent body that has not been previously approved by the appropriate authorities. At the undergraduate level it also includes a new option or minor, and at the graduate level it also includes new fields and new collaborative programs. Depending on the type of program, the levels at which approvals are required differ, as in Table A5.1 below. All programs require internal approval (up to the Senate level), and depending on whether Quality Council and/or MTCU approval is also required, additional approval steps are needed.

Table A5.1 Level of approval required for new programs, and major changes to existing programs

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Senate</th>
<th>External consultants</th>
<th>Quality Council</th>
<th>MTCU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad minor</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Undergrad option</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Graduate field</td>
<td>Yes</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
</tr>
<tr>
<td>Graduate collab. program</td>
<td>Yes</td>
<td>No</td>
<td>Yes*</td>
<td>Yes</td>
</tr>
<tr>
<td>New degree(undergrad or grad)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes in non-core areas</td>
</tr>
<tr>
<td>Certificate (undergrad or grad)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Diploma</td>
<td>Yes</td>
<td>No</td>
<td>Yes* (graduate)</td>
<td>Yes (graduate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No (undergrad)</td>
<td>No (undergrad)</td>
</tr>
<tr>
<td>Major change to existing program</td>
<td>Yes</td>
<td>No</td>
<td>No (but notification required)</td>
<td>No</td>
</tr>
</tbody>
</table>

*Follows Expedited Approval process defined by the Quality Council.

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1 The Quality Council defines a program (of specialization) as: "An identified set and sequence of courses, and/or other units of study, research and practice within an area of disciplinary or interdisciplinary study, which is completed in full or partial fulfillment of the requirements for the awarding of a degree, and is recorded on the graduate's academic record." The Quality Council further defines "full" fulfillment of the requirements when the program and degree program are one and the same, and "partial" fulfillment when the program is a subset of the degree program, eg a major, an honours program, a concentration or similar. (Quality Council 2010).
Major modifications

The Quality Council (2010) defines a major modification as one or more of the following program changes:

a) Requirements for the program that differ significantly from those existing at the time of the previous cyclical program review
b) Significant changes to the learning outcomes
c) Significant changes to the faculty engaged in delivering the program and/or to the essential physical resources as may occur, for example, where there have been changes to the existing mode(s) of delivery

Some substantive changes to existing programs (offering in a new location, in a new format) do not necessarily require approval but do require notification of the Quality Council. The Quality Council may in some cases determine that an external appraisal is required. For these changes, an abbreviated proposal with rationale is required. This requires approval at the Faculty and University level, and notification to Quality Council. Most curriculum changes require full internal approval, with the exception of existing courses which are offered in another UW campus, where the campus itself has already received Senate approval. In this particular case the proposal is sent through the usual committees for information (Department, Faculty, Senate Graduate and Research Council/Senate Undergraduate Council, Senate).

Notification to the Quality Council must occur in a timely enough manner such that if any concerns are identified, there is the opportunity to respond to/remedy these concerns prior to admission of new students in the new format, and, if necessary, to undertake an appraisal.

Other substantive changes do require both internal and the Quality Council approval (e.g. adding a graduate field, significant change in course requirements as defined above).

Aims:
The procedures for assessing proposals for new programs should ensure:

- the program achieves UW’s academic excellence goals;
- the program reflects UW distinctiveness, is technologically current, is creative and innovative in its curriculum content and delivery, and entrepreneurial and appropriately interdisciplinary in perspective;
- the program has the potential to be one of the best in Canada and at least among the top quarter of similar programs in North America;
- the program has the potential to attract excellent students;
- the program has sufficient resources committed to it.

Planning

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2 Significantly is here defined as a change in more than 40% of the required courses/required workload for the program
3 Significant changes here are defined as offering on a different campus, in a different mode (on-line versus in-class) or with a new institutional partner
Wherever the origins of the idea of a new program, the detailed planning process takes place in
the academic unit which will implement it. This planning is done in consultation with various
groups, some of which are: the Registrar’s Office; the Office of Institutional Planning and
Analysis; other relevant academic Departments in the University; Co-operative Education and
Career Services (CECS) (if a co-op plan is being proposed); the Offices of the Dean and
Associate Dean (Undergraduate/Graduate as appropriate) of the Faculty. In addition it is the
unit’s responsibility to meet the degree level expectations approved by the University (Appendix
1) and by MTCU, for non-core programs undergraduate and all graduate programs which are
requesting approval for specific funding for BIU entitlement (Appendices 6 and 7).

Program Proposal

A program proposal document is required. This should follow a similar format to that for
periodic reviews (Appendix 4), although there are some areas where information will not be
available. The main differences are as follows:
Sections 1.3 and 1.4: omit (information will not be available)
Sections 3.5 and 3.6: describe anticipated support (information on actual support will not be
available)
Section 4 should focus on what is anticipated rather than past experience
Section 5 should focus on anticipated numbers of students (information on other aspects will not
be available)
Section 7 is only relevant if external consultants will be used

Criteria:

Any proposed new program should meet the following minimum criteria and also the
requirements of Appendix 1, and MTCU, if needed:

Program’s Name – should be appropriate to the plan’s content and recognisable to potential
applicants and employers;

Plan’s Objective – should be consistent with UW’s mission; with the learning objectives of the
degree; and should be designed, structured and delivered so that graduates may
achieve the expectations of the degree (Appendix 1);

Admission Requirements – should be at a level to ensure the appropriate quality of student
applicants for the learning objectives of the institution and the program;

Learning Objectives - procedures are to be set up to judge that students are meeting acceptable
levels as they proceed through the program to graduation;

Curriculum – needs to be current, creative and innovative in content, and appropriate to the
plan’s learning objectives; the structure of the curriculum needs to be considerate of the number
of mandatory to elective courses as well as the streaming of these courses especially if the
proposed plan is co-op; needs to show how courses lead to undergraduate degree level
expectations;

Teaching – the mode of delivery (including online) needs to be appropriate to meet the learning
objectives of the program;

Student Evaluation – the methods of student evaluation should be appropriate for the plan;

Human Resources – the number, quality and academic experience of full-time appointments,
teaching assistants, technical staff and administrative staff are sufficient to meet the plan’s
potential demands;
Physical/Informational Resources – space, computer, and library resources are appropriate for the plan;

Financial Resources – evidence is present or commitment has been given that there are sufficient financial resources to introduce the plan and maintain it for the foreseeable future;

Societal Goals – an analysis has been undertaken to ascertain the potential demand for the plan; if it is a proposed co-op program, a feasibility study is required by CECS. If the potential student demand and/or potential co-op placements are not judged sufficient the co-op component will not proceed.

Approval Process:
The normal approval process is as follows (with some variations according to the organization of the academic unit, and whether one or more academic units are involved):

- approval by Departmental/School Curriculum Committee(s);
- approval by Department/School as a whole at a Department/School meeting;
- approval by the appropriate Faculty(ies) Undergraduate/Graduate Council(s);
- approval by the appropriate Faculty Council(s);
- site visit by external consultants (if required);
- Departments/School response to consultants and modifications of proposal (if required);
- approval by Senate Undergraduate Council or Senate Graduate and Research Council;
- approval by Senate; programs may be advertised once Senate approval has been granted, but should clearly state “subject to approval by the Quality Council”
- reports sent to the Quality Council for approval or information, whichever is appropriate;
- approval of funding by MTCU, if required;
- report to Board on new degrees/certificates/diplomas approved in previous year;
- Two-year Progress Report to Senate Undergraduate Council/Senate Graduate and Research Council and Senate, for new degrees, diplomas and certificates: should respond to any questions posed by initial reviewers and provide preliminary information on student numbers and progress;
- Two-year Progress Report to the Quality Council, if requested.

Site Visit (if required):
The guidelines for the site visit for current programs should be used. The main difference is that there are no existing students who can be interviewed. However, it may be appropriate (for some new programs) to invite current students who are interested in the new program, to meet with reviewers. This can include students who are interested in transferring into the new program (at the undergraduate level) or applying for the new program (current undergraduates interested in applying to a new graduate program).
APPENDIX 6: Core and Non-Core Undergraduate Programs (MTCU)

Undergraduate "Core Arts and Science" Programs:
Programs that are in basic disciplines which might be expected to be offered at any university (and are) appropriate to the academic ethos and character of any university.
Biological Sciences (including Biochemistry)
English Language and Literature
French Language and Literature
General Arts and Science
Humanities (including Ancient and Classical Languages)
Mathematical Sciences and Computer Studies
Physical Sciences
Social Sciences (including Women’s Studies)
Theology

Note: “Core Arts and Science Programs” are exempt from the approval process.

“Non-Core” Programs:
Accounting, Accountancy
Actuarial Science
Agricultural Business
Agriculture
Area Studies
Art Education, Conservation, Art Therapy
Clothing, Textiles, Design and Fashion
Commerce
Communications
Community, Urban and Regional Planning
Criminology
Dental Surgery
Dentistry
Dietetics
Drama
Education: Primary-Junior; Junior-Intermediate; Intermediate-Senior; Technological Studies;
French as a First Language
Engineering
Environmental Studies, Environmental Science
Family Studies, Family Science
Film, Cinema
Finance
Fine Art, Studio Art, Painting
Forest Technology
Forestry
Gerontology
Health Studies
Home Economics, Food Sciences
Horticulture
Industrial, Labour Relations
Journalism
Kinesiology
Labour Studies
Landscape Architecture
Language and Literature Studies
Law
Law Enforcement
Legal Studies
Library Science
Linguistics
Management, Business Management
Marketing
Medical Illustration
Medicine
Midwifery
Municipal Administration
Music
Native Studies
Nursing
Nursing Education
Occupational Therapy
Optometry
Personnel and Administrative Studies
Pharmacology
Pharmacy
Physical Therapy, Physiotherapy
Physical Education
Planning
Public Administration
Public Service Studies
Radiation Therapy
Recreation
Resource Management
Social Work
Speech pathology and Audiology
Survey Science
Systems Design
Theatre Arts
Translation, Interpretation
Urban Studies, Urbanism
Veterinary Medicine
War Studies
APPENDIX 7: Information the University Should Consider in Certifying Criteria Have Been Met (MTCU Criteria)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Institutional Check List</th>
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</table>
| 1. Program Nomenclature         | - Undergraduate: the University should ensure that the Senate or equivalent academic body has approved the undergraduate program.  
   - Graduate: the University should ensure that the Dean of Graduate Studies (or equivalent) has received a letter indicating the date program passed OCGS appraisal without requiring improvements.                                                                                           |
| 2. Academic Quality             | - Undergraduate: the University should ensure that the Senate or equivalent academic body has approved the undergraduate program.  
   - Graduate: the University should ensure that the Dean of Graduate Studies (or equivalent) has received a letter indicating the date program passed OCGS appraisal without requiring improvements.                                                                                           |
| 3. Financial Viability          | - the Board of Governors or equivalent body should ensure the university has in hand the requisite resources to introduce the program within existing funding levels and is prepared to maintain the program for a reasonable period of time. (The approval of a program is not grounds for a request for additional funding from the Ministry to initiate or sustain the program).  
   - where there is an increase in the minimum length of time required to complete an existing approved degree program, the institution should be able to justify the additional costs incurred to the institution, government and the student.  
   - In making these determinations, institutions should consider:  
     - the impact of the program on funding and how the institution intends to finance and staff the proposed program.  
     - the additional costs (capital expenditures, additional faculty, etc.), and the sources of additional funds (external grants, donations, government grants).  
     - how other programs will be affected (joint offerings, closure, rationalization, decreased in size, etc.), including how and whether or not any cost savings will be involved. |
| 4. Institutional Appropriateness | - the university should ensure the program is related to institutional mission, academic plans, and/or departmental plans.  
   - the university should ensure the program fits into the broader array of program offerings, particularly areas of teaching and research strength, collateral areas of study, etc.  
   - In making these determinations, institutions should consider:  
     - notable resources available to the program demonstrating institutional appropriateness e.g. Chairs, institutes, centres; unique library collections or resources; facilities such as computer, laboratory, other acquisitions, etc.  
     - external financial support demonstrating strength such as facility/equipment donations, other external donations, grants, etc. |
<table>
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</table>
| **5. Student Demand** | the University should ensure there is convincing evidence of student demand for the program  
In making these determinations, institutions should consider:  
- projected enrolment levels for the first five years of operation (if the program is in operation, use actual and projected data)  
- intended steady-state annual enrolment and steady-state total enrolment projections and the year(s) in which they will be achieved  
- evidence of student demand through application statistics, for example: number of enquiries, applications received, number of qualified applicants, use of macro-indicator data (graduate only)  
- origin of student demand (% domestic and visa students; graduate only - the undergraduate or master’s programs from which students would be drawn)  
- duration of the projected demand (e.g. short, medium or long-term demand from specified sources)  
- evidence of review and comment by appropriate student organization(s) |
| **6. Societal Need** | the University should ensure there is convincing evidence that graduates of the program are needed in specifically identified fields (academic, public and/or private sector)  
for professional program areas, the university should ensure congruence with current regulatory requirements of the profession  
In making these determinations, institutions should consider:  
- dimensions of the societal need for graduates (e.g. socio-cultural, economic, scientific, technological)  
- geographic scope of the societal need for graduates (e.g. local, regional, provincial, national)  
- trends in societal need for graduates  
- duration of the societal need (e.g. short, medium, or long-term)  
Examples of evidence for the above would be:  
- letters from a variety of potential employers of graduates who have seen the curriculum and commented upon the need for graduates within their organization and, more broadly, in their field of endeavour  
- professional society and/or association comments about the need for graduates based on a review of the curriculum  
- employment surveys, survey of the number of positions advertised in, for example, the CAUT Bulletin, AUCC University Affairs, etc.  
- statistics related to the number of Ontario students leaving the province to study in the same field elsewhere in Canada or abroad |
<table>
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| 7. Duplication | < the University should cite similar programs offered by other institutions in the Ontario university system.  
< the University should provide evidence of justifiable duplication based on societal need and/or student demand in cases where there are programs in the system that are the same or similar (Comments from other institutions regarding proposed new undergraduate programs will be sought by the Ministry. Comments regarding Health Science programs will also be sought from the Ministry of Health).  
< the University should indicate innovative and distinguishing aspects of the program  
< the University should indicate why the institution is offering the program on a "stand-alone" basis rather than merging its resources with another institution in a joint program |
Senate Undergraduate Council met on April 13, 2010 and Senate Graduate & Research Council met on April 12, 2010 and jointly agreed to forward the the Guidelines for Academic Program Reviews to Senate for approval. See Senate Graduate & Research Council’s report within this agenda.

Senate Undergraduate Council agreed to forward the following items to Senate for approval and information, as indicated below [further details may be obtained at: www.secretariat.uwaterloo.ca/Committees/senate/ugc.htm].

FOR APPROVAL

UNDERGRADUATE ADMISSION REQUIREMENTS FOR 2011

Motion: Council recommends approval of the undergraduate admission requirements for 2011 as detailed in attachment #1.

ENGLISH LANGUAGE REQUIREMENTS FOR 2011

Motion: Council recommends approval of the English language requirements for 2011 as detailed in attachment #2.

FACULTY OF ARTS – ONTARIO COLLEGE OF APPLIED ARTS AND TECHNOLOGY
ADMISSIONS REQUIREMENTS FOR 2011

Motion: Council recommends approval of the faculty of arts’ Ontario CAAT admissions requirements for 2011 as detailed in attachment #3.

NEW ACADEMIC PLANS [effective September 1, 2011]

Faculty of Arts

 Philosophy

 Philosophy Option

Motion: To approve the new option as described below:

Philosophy Option

Students in general or honours academic plans in any faculty other than arts may pursue the Philosophy Option.

The option requires successful completion of a minimum of 3.5 academic course units (seven courses) in philosophy with a minimum cumulative average of 65%, including:

- no more than two PHIL courses at the 100-level

Rationale: This proposed new plan is a response to a clear demand for such an option from students from other faculties. Students in (for example) the faculties of mathematics, engineering and science often take philosophy courses as electives and are often extremely strong philosophy students. This is no surprise, given the current prominence of philosophy of science and philosophy of mathematics in North American philosophy departments. The UW department is extremely strong in both of these areas. Many mathematics, engineering and science students take as many philosophy courses as they can and come close to earning a minor in philosophy, but are prevented from doing so by the rigidity of their plans. Creating a Philosophy Option will permit many of these students to add a manageable philosophy plan. The faculty of science hopes that this, in turn, will aid recruitment and retention at both the undergraduate and graduate level. With respect to the latter, it bears noting that it is increasingly common for students with undergraduate degrees in physics, mathematics, etc., to pursue graduate-level study in philosophy. The department views the proposed Philosophy Option as a means of supporting such students in making this transition.
ACADEMIC PLAN CHANGES  [effective September 1, 2011; also see note in rationale]

Faculty of Environment
Honours Co-operative Environment and Business

Motion: To approve the changes to the plan as described below:

Year 1 – no change

Year 2 – typographical change “2 elective” to “2 electives”

Year 3 – Removal of ERS 319 from the plan (as a theme elective) because this course has been discontinued by the Department of Environment and Resource Studies.

Years 3 and 4
–Removal of three core courses offered by other departments (ERS 317, PLAN 432, PLAN 440) and replacement with three free electives (one in year 3, two in year 4). These changes will:
  o Provide greater flexibility for students in years 3 and 4, thus facilitating students to take specializations and options offered in the faculty.
  o Allow 2+2 international joint program students to transfer additional course credits from their home university.
  o Facilitate future changes in availability of these courses, as suggested by the two home departments (School of Planning, and Department of Environment and Resource Studies).
  o The Environment and Business (EB) program will develop a list of suggested elective courses recommended by the program director, relevant to the EB subject area. All three of these courses (ERS 317, PLAN 432, PLAN 440) will be on this list.

–Theme elective adjustments:
  o Greater flexibility for students to select courses in the theme electives. Specifically, the changes will now allow for students to select more than one course within a theme, providing the opportunity for greater focus of study.
  o Shifting of ENBUS 310 from the theme of “Environmental Entrepreneurship” to the theme of “Corporate Sustainability” because this better reflects the subject covered.

Rationale: Organizational changes and context issues have had an effect on the EB program. In 2009: it moved to the new School of Environment, Enterprise and Development, several new instructors were hired, and the first cohort of Chinese students in the joint international 2+2 program arrived at UW. Additionally, in 2009, the EB program experienced its first regular program review. The proposed changes adjust the curriculum in light of these developments and represent an effort to accommodate insights from new instructors, feedback from existing students, and emerging developments in content in the topic areas of EB study. The most significant effect is that the curriculum, particularly in years 3 and 4, will be streamlined to better suit the needs of both the program and its students. It is noted that in addition to requesting approval for the 2011-2012 calendar, the faculty is also seeking approval for these changes to affect the 2009 and 2010 cohorts.

CHANGES TO FACULTY REGULATIONS  [effective September 1, 2011]

Faculty of Science
Rules for Students enrolled in Faculty of Science plans

Motion: To approve the addition of the following new statement in the faculty of science section of the undergraduate calendar as provided below:

Required to Withdraw - May Not Be Readmitted to Faculty

Any student who fails more than 5.0 units or has a previous “Failed Required to Withdraw” academic standing while registered in the faculty of science will have a “Required to Withdraw
- May Not Be Readmitted to Faculty” standing and will not be eligible to apply for readmission any time in the future.

**Rationale:** Statement added to clarify the difference between Failed Required to Withdraw and Required To Withdraw – May Not be Readmitted to Faculty standings.

**FOR INFORMATION**

**Distribution of Days, Spring Term 2010**

In January 2010, Senate approved changes to the *Guidelines for Determining Academic Calendar Dates* to include a provision that there be an even distribution of days in a term and not simply 60 teaching days. *(Ref: page ‘A89’, November 16, 2009 Senate agenda: www.adm.uwaterloo.ca/infosec/governance/Senate/20091116oagsen.pdf).* Senate approved this change after the spring 2010 dates had been established. Congruent with this provision, Senate Undergraduate Council approved that the Thursday timetable will be used on Tuesday, July 27 2010, and the Friday timetable will be used on Wednesday, July 28 2010, so that there are 12 of each day in the spring 2010 term.

**Academic Program Review Report**

**Independent Studies** – See attachment #4.

**Curricular modifications**

On behalf of Senate, council approved changes to academic plans, new courses, course changes and course inactivations for Renison University College (English for academic success non-credit courses), and the faculties of: arts (classical studies, philosophy); engineering (biomechanics option, civil and environmental engineering, electrical and computer engineering, general engineering, geological engineering, management sciences, nanotechnology engineering, options and electives for engineering students, systems design engineering, voluntary withdrawal rules); environment (diploma in environmental assessment, environment and business, environment and resource studies, knowledge integration, planning); and science (biology, chemistry, earth and environmental sciences, pharmacy, physics and astronomy, psychology, science).

/kjj

April 20, 2010

Geoff McBoyle

Associate Vice-President, Academic
Memo

To: Senate Undergraduate Council
From: Nancy Weiner, Associate Registrar, Admissions
Date: April 13, 2010
Re: Undergraduate Admission Requirements for 2011

For your consideration and approval, changes to the fall 2011 admission requirements for the following programs:

Faculty of Arts:
Accounting and Financial Management – Public Accounting Co-op
Accounting and Financial Management – Financial Management Co-op

Current fall 2010 admission course requirements:

- Any Grade 12 U English. A final grade of at least 75% is required.
- Advanced Functions
- One of Calculus and Vectors or Mathematics of Data Management
- Three other U or M courses

Recommended courses:
- Grade 12 M Principles of Financial Accounting is strongly recommended

Revised fall 2011 admission course requirements:

- Any Grade 12 U English. A final grade of at least 75% is required.
- Advanced Functions
- Calculus and Vectors
- Three other U or M courses

Recommended courses:
- Grade 12 M Principles of Financial Accounting is strongly recommended
- Grade 12 U Mathematics of Data Management is strongly recommended

Rationale:
The Accounting and Financial Management program has undergone a program review and MATH 109, which has previously been required in the 1B term, will be moved to the 1A term. Calculus is a pre-requisite for MATH 109; therefore, students must have high school Calculus as they will no longer have the opportunity to take MATH 104 in 1A (prior to MATH 109 in 1B).

If you have any questions, please do not hesitate to contact me at ext. 32265 or at nweiner@uwaterloo.ca.
Ontario Secondary School Applicants presenting the Ontario High School Curriculum

Ontario secondary school (OSS) students who will be completing the Ontario high school curriculum must present the Ontario Secondary School Diploma (OSSD) including a minimum of six grade 12 U or M courses. These courses must include all required courses as specified for each program.

An overall average of 75% on the best six grade 12 courses including the required courses is normally the minimum for consideration. Higher averages are required for admission to programs in which the demand for places by qualified applicants exceeds the number of places available. The actual minimum averages required for these programs are determined each year on the basis of the number and qualifications of applicants and the number of available spaces.

In some programs, applicants may be considered for early conditional admission based on factors that include their grade 11 academic record, their grade 12 record to date, and other factors noted under "Other Documentation" in the chart.

The University reserves the right to withdraw conditional offers of admission if the applicant fails to meet the requirements specified above or any specific conditions stated on the offer of admission.
<table>
<thead>
<tr>
<th>Faculty/Program</th>
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<th>Recommendations</th>
<th>Other Documentation</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate first-year entry programs: All required courses are OSS Grade 12 U or M courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average. Program requiring prior university studies: Requirements are as listed.</td>
<td>Undergraduate first-year entry programs: Courses listed are OSS Grade 12 U courses unless otherwise specified and are not required for admission but are recommended because students may find this preparation useful during their university studies. Programs requiring prior university studies: Recommendations are as listed.</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
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</table>

### Applied Health Sciences

#### All Programs

All programs require six Grade 12 U or M courses including specified courses.

#### Health Studies

- Biology
- Chemistry
  
  A final grade of at least 70% is normally required in each of the above required courses.
- Additional U or M courses for a total of six

- Advanced Functions
- English (ENG4U)

For students considering the Pre-Health Professions Specialization:
- Advanced Functions
- English (ENG4U)
- Physics

Special consideration is given on the basis of strength in Biology and Chemistry. Those not admitted to the co-op program are automatically considered for the corresponding regular program. The first co-op work term begins in Year Two.

#### Kinesiology

- Advanced Functions
- Chemistry
- One of Biology or Physics
  
  A final grade of at least 70% is normally required in each of the above required courses.
- Additional U or M courses for a total of six

Special consideration is given on the basis of strength in Advanced Functions, Chemistry, and Biology or Physics. Those not admitted to the co-op program are automatically considered for the corresponding regular program. The first co-op work term begins in Year Two.

#### Recreation and Leisure Studies

- Any Grade 12 U English
  
  A final grade of at least 70% is normally required.
- Additional U or M courses for a total of six

For all students:
- one Grade 12 U or M course from Arts, Business Studies, Canadian and World Studies, Classical Studies, French as a Second Language, Interdisciplinary Studies, International Languages, or Social Sciences and Humanities courses

For students considering the Therapeutic Recreation program:
- Biology or Exercise Science

For students considering the Recreation and Business program:
- Grade 12 M Principles of Financial Accounting

Applicants should be aware that, although this is a social science program, courses in research methods and statistics are included in the curriculum. Writing skills are important. Involvement in extracurricular activities is an important factor in admission decisions. Those not admitted to the co-op program are automatically considered for the corresponding regular program. Limited admission to co-op is also available in Year Two. The first co-op work term begins in Year Two.
## Admission Requirements and Recommendations for Year One Programs 2011

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Arts (All Programs)</strong></td>
<td>All programs require six Grade 12 U or M courses including a Grade 12 U English.</td>
<td>Undergraduate first-year entry programs: All required courses are OSS Grade 12 U courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average.</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
<td>When the Admissions Committee considers an application individually, it bases its decision on the overall average, the English grade, and information provided on the Admission Information Form. If Grade 12 courses are repeated, the highest grade attained will be used for making admission decisions. Renison University College and St. Jerome's University have the same admission standards as the University.</td>
</tr>
<tr>
<td><strong>Honours Arts Regular</strong></td>
<td>In addition to the requirement for all Arts programs specified above, a final grade of at least 70% in any Grade 12 U English is required.</td>
<td>For Social Science programs such as Anthropology; Economics; Geography and Environmental Management; Political Science; Psychology; Sexuality, Marriage, and Family Studies; Social Development Studies; or Sociology: • Mathematics of Data Management</td>
<td>Admission Information Form (AIF) is strongly recommended.</td>
<td>Entry to General or Honours major programs, including departmental co-op, occurs following Year One, and is based on academic performance in Year One in relevant courses in the prospective major. Honours Arts Regular is offered through the University of Waterloo, Renison University College, and St. Jerome's University.</td>
</tr>
<tr>
<td><strong>Arts and Business Regular and Co-op</strong></td>
<td>In addition to the requirement for all Arts programs specified above, a final grade of at least 70% in any Grade 12 U English is required.</td>
<td></td>
<td></td>
<td>Selection of the Honours major which is to be combined with Arts and Business occurs following Year One and is based on academic performance in the prospective major in Year One. Honours Arts and Business is offered through the University of Waterloo, Renison University College, and St. Jerome's University. Those not admitted to the Co-op program are automatically considered for the corresponding Regular program.</td>
</tr>
<tr>
<td><strong>Social Development Studies Regular Renison University College</strong></td>
<td>In addition to the requirement for all Arts programs specified above, a final grade of at least 70% in any Grade 12 U English is required.</td>
<td>• Mathematics of Data Management</td>
<td>Admission Form (AIF) is strongly recommended.</td>
<td>Those not admitted to Social Development Studies in Year One are automatically considered for Honours Arts Regular through Renison University College. Based on academic performance in Year One, admission to General or Honours Social Development Studies at the Year Two level is possible.</td>
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</table>
## Admission Requirements and Recommendations for Year One Programs 2011

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<td>Undergraduate first-year entry programs: All required courses are OSS Grade 12 U courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average. Programs requiring prior university studies: Requirements are as listed.</td>
<td>Undergraduate first-year entry programs: Courses listed are OSS Grade 12 U courses unless otherwise specified and are not required for admission but are recommended because students may find this preparation useful during their university studies. Programs requiring prior university studies: Recommendations are as listed.</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
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### Arts (Continued)

**Accounting and Financial Management - Financial Management Co-op**
- Any Grade 12 U English. A final grade of at least 75% is required.
- Advanced Functions
- Calculus and Vectors
- Three other U or M courses

**Accounting and Financial Management - Public Accounting Co-op**
- Grade 12 M Principles of Financial Accounting is strongly recommended
- Grade 12 U Mathematics of Data is strongly recommended

**Admission Information Form (AIF) is required**
- Accounting and Financial Management Admissions Assignment, see notes section.

### Independent Studies Regular
- In addition to the requirement for all Arts programs, a final grade of at least 70% in any Grade 12 U English is required.

**Autobiographical Letter**
**Interview**
**Letters of Reference**

Applicants should be capable of doing university-level work on their own and should be planning studies that can be done at the University of Waterloo.

### Computing and Financial Management (Co-op)

**Computing and Financial Management Co-op**
- Advanced Functions
- Calculus and Vectors
- Any Grade 12 U English. A final grade of at least 75% is required.
- One other Grade 12 U course
- Two other U or M courses

**Grade 11 U Introduction to Computer Science**
**Grade 12 M Principles of Financial Accounting**

**Admission Information Form (AIF) which includes a teacher reference. All applicants are encouraged to write the Euclid Mathematics Contest. Applicants not currently attending an Ontario Secondary School are strongly advised to write the Euclid contest to demonstrate that they have sufficient mathematical background. The Canadian Computing Competition is recommended.**

In addition to a strong academic background, other factors considered in the admission process include performance in contests such as the Euclid Mathematics Contest and the Canadian Computing Competition, the number and variety of courses taken, involvement in extracurricular activities in the school and/or the community, and teacher recommendations. Those not offered admission to Computing and Financial Management may be considered for alternative programs in the Faculty of Mathematics.
### Admission Requirements and Recommendations for Year One Programs 2011

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<tr>
<td><strong>Engineering (Co-op)</strong></td>
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<tr>
<td>Architecture Co-op</td>
<td>Undergraduate first-year entry programs: All required courses are OSS Grade 12 U courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average. Programs requiring prior university studies: Requirements are as listed.</td>
<td>Undergraduate first-year entry programs: Courses listed are OSS Grade 12 U courses unless otherwise specified and are not required for admission but are recommended because students may find this preparation useful during their university studies. Programs requiring prior university studies: Recommendations are as listed.</td>
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<td>Chemical Civil Computer Electrical Environmental Geological Management Mechanical Mechatronics Nanotechnology Systems Design Co-op</td>
<td>• English (ENG4U). A final grade of at least 75% is normally required. • Advanced Functions • Calculus and Vectors • Physics A final grade of at least 70% is normally required in each of these courses. • Two other U or M courses</td>
<td>• Grade 11 or 12 M Arts courses • Independent arts studies • Creative and cultural studies such as visual arts and history</td>
<td>Interview English précis-writing exercise Portfolio Admission Information Form (AIF) is required</td>
<td>Applicants are selected for the interview on the basis of grade 11 marks and any interim or final OSS grade 12 marks available at the time interview selection occurs. Those selected for an interview are expected to come to the University. Admission is based on the results of the interview, the portfolio, the English précis-writing exercise, and secondary school achievement. In addition to a strong academic background, other factors which will be considered in the admissions process include involvement in extra-curricular activities in school and/or in the community; evidence of an interest in engineering; and strong performance in mathematics, science, or engineering-related competitions. Those not offered admission to their first-choice program may be considered for other engineering programs that they specify on the Admission Information Form.</td>
</tr>
</tbody>
</table>
Admission Requirements and Recommendations for Year One Programs 2011

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<thead>
<tr>
<th>Faculty/Program</th>
<th>Requirements</th>
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<th>Other Documentation</th>
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<tbody>
<tr>
<td>Undergraduate first-year entry programs:</td>
<td>All required courses are OSS Grade 12 U courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average.</td>
<td>Undergraduate first-year entry programs: Courses listed are OSS Grade 12 U Courses unless otherwise specified and are not required for admission but are recommended because students may find this preparation useful during their university studies. Programs requiring prior university studies: Recommendations are as listed.</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
<td></td>
</tr>
</tbody>
</table>
| Environment and Business Co-op | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- Five other U or M courses | - One Grade 12 U Mathematics  
- One Grade 12 U Science  
- Grade 12 M Principles of Financial Accounting  
- Analysing Current Economics Issues (where offered) | Admission Information Form (AIF) | Those not admitted to Honours Environment and Business Co-op are automatically considered for Honours Geography and Environmental Management. The first co-op work term begins in Year Two. |
| Environment and Resource Studies Regular and Co-op | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- Five other U or M courses | At least one Grade 12 U or M course from each of: Canadian and World Studies or Social Sciences and Humanities or the Arts  
- Mathematics or Science | Admission Information Form (AIF) | In accordance with the trans-disciplinary nature of ERS, we value flexibility and breadth of learning and experience. Those not admitted to the co-op program are automatically considered for the corresponding regular program. Limited admission to co-op is also available in Year Two. The first co-op work term begins in Year Two. |
| Geography and Aviation Regular | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- A Grade 12 U Mathematics. A final grade of at least 70% is required.  
- Four other U or M courses | - One or more Grade 12 U or M Geography courses are strongly recommended.  
- A second Grade 12 U Mathematics  
- Earth and Space Science | Admission Information Form (AIF)  
Program Briefing Session  
Transport Canada Category 1 Medical Certification | Those not admitted to Honours Geography and Aviation are automatically considered for Honours Geomatics Regular. |
| Geography and Environmental Management Regular and Co-op | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- Five other U or M courses | - One or more Grade 12 U or M Geography courses are strongly recommended.  
- A Grade 12 U Mathematics  
- Earth and Space Science | Admission Information Form (AIF) | Those not admitted to the co-op program are automatically considered for the corresponding regular program. Limited admission to co-op is also available in Year Two. The first co-op work term begins in Year Two. |
### Admission Requirements and Recommendations for Year One Programs 2011

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<tr>
<td><strong>Environment (cont’d)</strong></td>
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</tbody>
</table>
| **Geomatics** | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- A Grade 12 U Mathematics. A final grade of at least 70% is required.  
- Four other U or M courses | - A second Grade 12 U Mathematics  
- Grade 11 U Introduction to Computer Science is highly recommended.  
- Grade 12 U Computer Science would be an asset. | Admission Information Form (AIF) | Those not admitted to the co-op program are automatically considered for the corresponding regular program. Limited admission to co-op is also available in Year Two. The first co-op work term begins in Year Two. |
| **International Development** | | | | |
| **Regular** | - Any Grade 12 U English. A final grade of at least 70% is normally required.  
- At least one Grade 12 U Science or Mathematics course. A final grade of at least 70% is normally required.  
- Four other U or M courses | - At least one Grade 12 U course in a second language | Admission Information Form (AIF) is required. | |
| **Knowledge Integration** | | | | |
| **Regular** | - Any Grade 12 U English. A final grade of at least 75% is normally required.  
- Any Grade 12 U Science  
- Any Grade 12 U Mathematics  
- Three other U or M courses | | Admission Information Form (AIF) is required. | |
| **Planning Co-op** | - Any Grade 12 U English. A final grade of at least 75% is required.  
- Five other U or M courses | Grade 12 U or M courses from the following:  
- Canadian and World Studies  
- Mathematics  
- Science, preferably Biology or Earth and Space Science | Admission Information Form (AIF) | Those not admitted to the co-op program are automatically considered for the corresponding regular program. Limited admission to co-op is also available in Year Two. The first co-op work term begins in Year Two. |
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<tbody>
<tr>
<td><strong>Computational Mathematics</strong></td>
<td>Undergraduate first-year entry programs:</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regular and Co-op</strong></td>
<td>All required courses are OSS Grade 12 U courses unless otherwise specified and must be included in the required set of 6. Required courses are included in the calculation of the admission average.</td>
<td>Programs requiring prior university studies: Recommendations are as listed.</td>
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<tr>
<td><strong>Computer Science</strong></td>
<td>Programs requiring prior university studies: Recommendations are as listed.</td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
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<tr>
<td><strong>Mathematics</strong></td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
<td></td>
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<tr>
<td><strong>Mathematics/Chartered Accountancy</strong></td>
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<tr>
<td><strong>Co-op</strong></td>
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<tr>
<td><strong>Business Administration</strong></td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Mathematics/Business Administration</strong></td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
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<td></td>
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<tr>
<td><strong>Mathematics/Financial Analysis and Risk Management</strong></td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
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<tr>
<td><strong>Business Administration and Mathematics</strong></td>
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<tr>
<td><strong>Double Degree</strong></td>
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<tr>
<td><strong>Co-op</strong></td>
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<tr>
<td><strong>Bioinformatics</strong></td>
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<tr>
<td><strong>Regular and Co-op</strong></td>
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</tbody>
</table>

### Mathematics

- Advanced Functions
- Calculus and Vectors
- Any Grade 12 U English
- One other Grade 12 U course.
- Two other U or M courses.

- Grade 11 U Introduction to Computer Science

Applicants to all programs in Mathematics:

Admission Information Form (AIF) which includes a teacher reference. All applicants are encouraged to write the Euclid Mathematics Contest. Applicants not currently attending an Ontario Secondary School are strongly advised to write the Euclid Contest to demonstrate that they have sufficient mathematical background.

For those applying to Bioinformatics, Computer Science, Business Administration and Computer Science Double Degree, the Canadian Computing Competition is recommended.

- Grade 12 M Principles of Financial Accounting

Applicants to Mathematics/Chartered Accountancy:

- Advanced Functions
- Calculus and Vectors
- Chemistry
- Any Grade 12 U English
- One of Biology or Physics
- One other U or M course.

- Admission to the Mathematics Co-op Teaching Option occurs in Year Two after successful completion of Year One in either Honours Co-op Computer Science or Honours Co-op Mathematics.

- Honours Business Administration and Mathematics Co-op is a double degree program offered jointly by Wilfrid Laurier University and UW leading to BBA and BMath degrees.

- Honours Business Administration and Computer Science Co-op is a double degree program offered jointly by Wilfrid Laurier University and UW leading to BBA and BCS degrees.

All Mathematics programs are offered through the University of Waterloo and St. Jerome's University. The decision to register at St. Jerome's occurs after admission.

In addition to a strong academic background, other factors considered in the admissions process include performance in contests such as the Euclid Mathematics Contest and the Canadian Computing Competition, the number and variety of courses taken, involvement in extracurricular activities in the school and/or the community, and teacher recommendations.

Those not offered admission to their first choice program will be considered for other Mathematics programs.

The Faculty administers the English Language for Academic Studies (ELAS) program for those with exceptional mathematics skills who do not meet normal English language requirements.

Admission to the Mathematics Co-op Teaching Option occurs in Year Two after successful completion of Year One in either Honours Co-op Computer Science or Honours Co-op Mathematics.

Honours Business Administration and Mathematics Co-op is a double degree program offered jointly by Wilfrid Laurier University and UW leading to BBA and BMath degrees.

Honours Business Administration and Computer Science Co-op is a double degree program offered jointly by Wilfrid Laurier University and UW leading to BBA and BCS degrees.
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<tr>
<td><strong>Science</strong></td>
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</tr>
<tr>
<td>Biotechnology/Chartered Accountancy Co-op</td>
<td>Six Grade 12 U or M include:</td>
<td>• Biology</td>
<td>Information which is used in addition to course requirements is detailed below when applicable. The appropriate information will be requested when an application is acknowledged.</td>
<td></td>
</tr>
<tr>
<td>Biotechnology/Economics Co-op</td>
<td>• Any Grade 12 U English. A final grade of 70% is normally required.</td>
<td>• Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honours Science Regular</td>
<td>• Advanced Functions A final grade of 70% is normally required.</td>
<td>• Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science Regular and Co-op</td>
<td>• Calculus and Vectors A final grade of 70% is normally required.</td>
<td>• Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Sciences Regular and Co-op</td>
<td>Two of</td>
<td>• Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Sciences Regular and Co-op</td>
<td>• Biology</td>
<td>• Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science and Aviation Regular</td>
<td>• Chemistry Earth and Space Science Physics</td>
<td>• Chemistry Earth and Space Science Physics</td>
<td>Admission Information Form (AIF) is strongly recommended.</td>
<td>The first co-op work term begins in Year Two for all Faculty of Science students.</td>
</tr>
<tr>
<td>Science and Business Co-op (All specializations)</td>
<td>• Chemistry Introduction to International Business</td>
<td>• Optometry Admissions Test (OAT) Autobiographical Sketch Essay Optometrist and Academic References</td>
<td></td>
<td>Please refer to the School of Optometry website regarding required and recommended university-level courses.</td>
</tr>
<tr>
<td>Optometry Regular</td>
<td>Successful completion of at least three full years of university-level science with specific course requirements.</td>
<td>• Optometry Admissions Test (OAT) Autobiographical Sketch Essay Optometrist and Academic References</td>
<td></td>
<td></td>
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<tr>
<td>Pharmacy Co-op</td>
<td>Successful completion of at least two full years of university-level science with specific course requirements.</td>
<td></td>
<td>• Pharmacy Admission Profile&lt;br&gt; • Letter of Reference Form&lt;br&gt; • Interview&lt;br&gt; • Reading Comprehension/Writing Test</td>
<td>Please refer to the School of Pharmacy website regarding admission averages and required university-level courses. Secondary School applicants applying to Honours Science or Honours Life Sciences may also be considered for conditional admission to Pharmacy. Refer to School of Pharmacy website regarding requirements.</td>
</tr>
<tr>
<td>Social Work</td>
<td>Successful completion of either a three-year or a four-year undergraduate degree with a B average and at least 6.0 units in the social sciences, including 10 specified courses from the Renison curriculum or their equivalents.</td>
<td>Letter of reference and personal statement which demonstrates sufficient practical experience and personal suitability are required.</td>
<td></td>
<td>Please refer to the Social Work website regarding required university-level courses.</td>
</tr>
<tr>
<td>Software Engineering (Co-op)</td>
<td>Advanced Functions&lt;br&gt; Calculus and Vectors&lt;br&gt; Chemistry&lt;br&gt; English (ENG4U)&lt;br&gt; Physics&lt;br&gt; A final grade of at least 70% is normally required in each of these courses.&lt;br&gt; One other U or M course&lt;br&gt; Grade 11 U Introduction to Computer Science is highly recommended.&lt;br&gt; Grade 12 U Computer Science would be an asset.</td>
<td>Admission Information Form (AIF).&lt;br&gt; Experience in developing well-structured, modular programs is required, as demonstrated by at least one of the following:&lt;br&gt; (1) strong performance in a programming course such as Grade 11 U Intro to Computer Science or Grade 12 U Computer Science or equivalent,&lt;br&gt; (2) strong performance in a programming contest, such as the Canadian Computing Competition,&lt;br&gt; (3) significant work experience,&lt;br&gt; (4) other (must be explained on the Admission Information Form).</td>
<td></td>
<td>In addition to a strong academic background, other factors which will be considered in the admissions process include involvement in extracurricular activities in school and/or the community; evidence of interest in software engineering, additional OSS Grade 12 courses; and participation in mathematics, science, engineering, or programming competitions. All applicants are encouraged to write the Euclid Mathematics Contest. Those not offered admission to Software Engineering may be considered for alternate engineering programs or for computer science; applicants specify their preferences for alternate programs on their Admission Information Form.</td>
</tr>
</tbody>
</table>
Memo

To: Senate Undergraduate Council

From: Nancy Weiner, Associate Registrar, Admissions

Date: April 13, 2010

Re: English Language Requirements for 2011

For your consideration and approval, I am presenting changes to the undergraduate admissions English Language Requirements (ELR) for applicants whose first language is not English.

Current English Language Requirements:

<table>
<thead>
<tr>
<th>Faculty/Program</th>
<th>Paper-based TOEFL (PBT)</th>
<th>Internet-based TOEFL (IBT)</th>
<th>IELTS</th>
<th>MELAB</th>
<th>CAEL</th>
<th>EFAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Health Sciences, Science, Mathematics - Regular, Computer Science - Regular</td>
<td>580; TWE 4.5; TSE 45</td>
<td>90; 25 writing; 25 speaking</td>
<td>7.0</td>
<td>85</td>
<td>70</td>
<td>60 per band</td>
</tr>
<tr>
<td>Arts, Computing &amp; Fin Mgmt, Environment, Mathematics - Co-op, Computer Science - Co-op</td>
<td>600; TWE 5.0; TSE 50</td>
<td>90; 25 writing; 25 speaking</td>
<td>7.5</td>
<td>90</td>
<td>70 per band; 70 writing*; 70 speaking*</td>
<td></td>
</tr>
<tr>
<td>Architecture, Engineering, Software Engineering</td>
<td>600; TWE 5.0; TSE 50</td>
<td>100; 26 writing; 26 speaking</td>
<td>7.5</td>
<td>90</td>
<td>70 per band; 70 writing; 70 speaking</td>
<td></td>
</tr>
</tbody>
</table>

*For Mathematics - Co-op and Computer Science - Co-op programs, only the 70 speaking is required.

- Paper-based TOEFL, MELAB, and CAEL test scores are rarely submitted for admission consideration.
- EFAS - English for Academic Success at Renison University College.

Revised Minimum English Language Requirements – Effective January 1, 2011:

For All Faculty/Programs at Waterloo:

<table>
<thead>
<tr>
<th>Paper-based TOEFL (PBT)</th>
<th>Internet-based TOEFL (IBT)</th>
<th>IELTS</th>
<th>MELAB</th>
<th>CAEL</th>
<th>New Test PTE* (Academic)</th>
<th>EFAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>580; TSE 50</td>
<td>90; writing 25; speaking 25</td>
<td>7.0</td>
<td>85</td>
<td>70</td>
<td>60 per band; writing 70; speaking 70</td>
<td>63; writing 65; speaking 55</td>
</tr>
</tbody>
</table>

* PTE (Academic) = Pearson Test of English (Academic)
** English for Academic Success (EFAS) – discretionary range set at 75 – 79% in level 400
Notes:
1. The English Language Requirements stated above are minimum required scores and applicants with higher scores may be given preference during individual selection.
2. Applicants who present either an iBT overall score of 90 (writing and/or speaking of 23 or 24) or an IELTS score of 6.5 (no band below 6.0) may be considered on an individual basis. A letter from the applicant requesting special consideration must be submitted by the document deadline.

The revised minimum English Language Requirements will be closely monitored and adjusted if a significant trend is detected. The scores are guidelines only and are subject to change.

Rationale:

Observation and research indicates the following:
1. Waterloo’s ELR scores are among the highest across Canadian schools.
2. The high ELR may be significantly limiting our recruitment efforts for international students, as well as students for the UAE programs.
3. There appears to be inconsistency between the ELR requirements for different testing systems.
4. The published ELR are sometimes softened during admissions, taking into account additional factors like Grade 11 and 12 English grades, AIF quality, and quality of email and telephone contact where available. Therefore, the published ELRs are not truly representative of the minimum levels.
5. Other universities have consistency in their ELR scores across faculty programs while at Waterloo we have different scores across faculties and programs.
6. Pearson Test of English (Academic) is a new English Language Proficiency Test that has been launched October 2009.

The revised minimum English Language Requirements were established by completing the following research:
- Common European Framework of Reference for Languages (CEFR) that has been developed to help standardize language requirements based on a functional approach to writing, reading, and speaking.
- Percentile Ranking of Test Scores as established by each of the English language testing organizations.
- Comparison of the minimum English Language Requirements at other Canadian Universities.
- Discussions with faculty undergraduate admissions committees and the English Language Institute at Renison University College.
- PTE (Academic) scores – In addition to the first four bullets, a presentation of the test and discussion with Pearson representatives occurred.

A background document providing additional details on how the minimum English Language Requirements were established can be made available upon request.

If you have any questions, please do not hesitate to contact me at ext. 32265 or at nweiner@uwaterloo.ca.
Memo

To: Senate Undergraduate Council
From: Nancy Weiner, Associate Registrar, Admissions
Date: April 13, 2010
Re: Faculty of Arts – Ontario College of Applied Arts and Technology admissions requirements effective for September 2011 entry

For your consideration and approval, changes to the Faculty of Arts – College of Applied Arts and Technology (CAAT) admissions requirements for 2011:

Current admissions requirements:

Graduates of two- and three-year diploma programs must present a minimum cumulative average of B (75%) in the college program to be considered for admission to Arts regular programs. For consideration for admission to the Accounting and Financial Management, Arts and Business Regular and Co-op programs higher averages, in the A- to A (80% to 85%) range, are often required. Applicants must also have a minimum of 70% (75% for Accounting and Financial Management and Computing and Financial Management) in Ontario Grade 12 U English or equivalent.

Transfer credit is awarded according to the nature and length of the diploma program completed and reflects groups of courses within those completed programs. A grade of B- (70%) or better is required in individual, transferable courses. As much as 2.5 units (5 term courses) may be awarded for each year completed in the C.A.A.T. program. A maximum of 7.5 units (15 term courses) may be awarded for graduates of a three-year program.

Revised fall 2011 admissions requirements:

Graduates of two- and three-year diploma programs must present a minimum cumulative average of B (75%) in the college program to be considered for admission to the Arts and Arts and Business regular programs. Applicants must also have a minimum of 70% in Ontario Grade 12 U English (or equivalent). Graduates of two- and three-year diploma programs are ineligible for admission to Arts Departmental Co-op and Arts and Business Co-op programs.

For consideration for admission to Accounting and Financial Management, applicants must present a minimum cumulative average of A (85%) in their College program. Applicants must also have a 75% in Ontario Grade 12 U English (or equivalent) and must have completed the required Ontario Grade 12 U Math courses (or equivalents). Qualified applicants will be invited to write the Accounting and Financial Management Admissions Assignment.
Transfer credit is awarded according to the nature and length of the diploma program completed and reflects groups of courses within those completed programs. A grade of B- (70%) or better is required in individual, transferable courses. As much as 2.5 units (5 term courses) may be awarded for each year completed in the C.A.A.T. program. A maximum of 7.5 units (15 term courses) may be awarded for graduates of a three-year program.

Transfer applicants to the Accounting and Financial Management program can only be considered for admission to Year 1 or 2 of the Financial Management stream of the Accounting and Financial Management program. Academic level is determined based on the nature of the courses completed in the College diploma program.

**NEW - Faculty of Arts - Four Year Applied Degree Requirements:**

Graduates of four year Applied Bachelor's Degree programs must present a minimum cumulative average of 70% in the degree program to be considered for admission to Arts regular programs. Graduates of 4-Year Applied Degree programs are ineligible for admission to Accounting and Financial Management and Co-op programs.

Transfer Credit is awarded according to the nature of the program and courses completed. Courses must be of an academic nature in order to be considered for transfer credit. A grade of 70% or better is required in individual, transferable courses. As much as 2.5 credits (equivalent to 5 term courses) may be awarded for each year of the completed Applied Bachelor's degree program to a maximum of 10.0 credits (equivalent to 20 term courses). Applicants may be asked to support their applications with appropriate course descriptions and/or course outlines.

**Rationale:**

Effective for fall 2011 entry, the Faculty of Arts Admissions Committee approved revised admissions requirements for Ontario College of Applied Arts and Technology transfer students. The admissions requirement provides clarification on the minimum admission standards being applied to applicants from an Ontario College of Applied Arts and Technology to the different Faculty of Arts programs.

Graduate of two-, three-, or four-year Ontario CAAT programs are ineligible for departmental co-op or the Arts and Business co-op programs due to (i) major requirements and (ii) academic levels as a result of transfer credit.

i) Students entering the 2A term of the Arts and Business program must qualify for an honours major in order to proceed in the program and participate in co-op. Departmental co-op plans also require that students qualify for an honours major to participate in co-op. Historically, very few students from CAAT programs have presented the pre-requisites or average requirements for an Honours program.

ii) Students receiving more than one-year of transfer credit begin studies at an upper year level (i.e. 2B, 3A) that would not permit them to complete the number of co-op terms to fulfill degree requirements.

The Admissions Committee will review individual cases that may warrant an exception to this rule.

In addition, the Ontario Colleges of Applied Arts and Technology now offers four-year applied degrees and the first group of students are now graduating and applying to university programs. This admissions requirement outlines minimum standards for applicants who are applying from an Ontario CAAT - four year applied degree to the Faculty of Arts.

If you have any questions, please do not hesitate to contact me at ext. 32265 or at nweiner@uwaterloo.ca.
INDEPENDENT STUDIES

Review Process

This was the sixth formal review of the Independent Studies (IS) program. Previous studies of IS were carried out in 1975, 1978, 1985, 1988 and 2001-2002. The current structure of IS was largely put in place following the 1988 review. Implementation of recommendations from the 2001-2002 review was affected significantly by the administrative reorganization in 2005 when IS became part of the Faculty of Arts.

The self study for this review was submitted October 7, 2009; the site visit occurred November 4 and 5, 2009; the review team report was received January 4, 2010; and the strategic plan was submitted March 17, 2010.

Characteristics of the Program

Historical Review

Independent Studies was established in 1969 as the first degree program of its type in Canada. The Bachelor of Independent Studies (BIS) is a Three Year General degree conceived as a non-traditional university-based opportunity for students whose learning and education potential flourishes under a thesis-oriented mentorship model. The IS program offers the opportunity for intensive one-on-one mentoring for students interested in structured, self-directed inquiry into a focused topic within a broadly interdisciplinary context. This approach to post-secondary education is well-suited to three identified groups of potential students: a small group of well-qualified high school graduates; students transferring into IS from other university programs; adult learners returning to school to finish a university degree. While there is no “typical” IS student, students who do best in this program are mature, creative and directed by a strong focus on a topic or set of interests which are not well-addressed by more traditional programs.

In 2005, the IS program was placed under the administrative umbrella of the Faculty of Arts, while retaining its academic autonomy as a cross-institutional program under the direction of an Academic Board offering its own degree, the BIS. The Academic Board, which includes representatives from each of the six Faculties at the University of Waterloo (UW), provides oversight of the academic quality of the program and approves students for graduation when their thesis project and other academic requirements for the program have been met.

In 2008, a Four Year Honours BIS degree was approved by Senate to complement the current Three Year plan of studies. Students will begin the Honours program in Fall 2010. A transition process has been developed for students who wish to transfer from the Three Year General BIS into the Four Year Honours BIS plan.

In 2008, a review was carried out of undergraduate programs in Canada and elsewhere identified as “independent” and “interdisciplinary”.

In general, programs identified as ‘independent studies” are associated with distance education or are special components (courses and projects) of more traditionally structured programs.

With respect to “interdisciplinary studies”, UW’s Bachelor of Knowledge Integration (BKI) offers an excellent example of another cross-faculty interdisciplinary undergraduate degree. While the BKI and Carleton University’s Institute of Interdisciplinary Studies share some values and principles with IS neither offer the level of flexibility of the IS program, nor the mentored one-on-one advising on self-directed studies which is the hallmark of IS.
Forty years since its establishment IS is still unique in Canada.

IS has an extensive history of previous reviews. The first internal review of IS was carried out in 1975 in order to assess the degree to which IS was functioning according to Senate Guidelines established in 1972. At that time the program’s mandate was extended with a request that a report on the state of the IS program come to Senate by June 1978.

The 1978 report concluded that the program would continue to work at improving quality, while maintaining the “breadth of opportunities provided by IS … to meet the changing needs of students who choose IS as a vehicle for their education”.

Two Senate-mandated reviews followed in 1985 and 1988. The recommendations from these reviews resulted in an affirmation of the academic goals and role of IS together with the need for new organizational arrangements for IS that were put in place in 1989-1990.

The first program review carried out under current University Guidelines for Academic Program Reviews took place in 2001-2002. The review team concluded that IS “plays a small but important role in the educational goals of the University of Waterloo” and that IS “has done a very good job in maintaining high academic standards and graduating quality students who have gone on to perform well in a broad range of careers and graduate disciplines.” The report did say that the greatest threat to ensuring ongoing quality in the IS program is its dependence on volunteers.

Erosion and fluctuation of financial resources available to IS over the past decade has had a significant impact and adds further emphasis to concerns expressed at the time of the last review (2001) about resource allocations to IS.

Ten years ago, with approximately the same number of full-time students, the program had a Director who could devote 50 to 60 per cent of his time to the program, a half-time administrative assistant and four to five academic advisors. Currently IS has a Director who works for the program on the basis of an annual two-course teaching buyout and does not receive a stipend or credits toward administrative leave. The administrative assistant now works 20 hours per week up from 17.5 hours. The program Director and two academic advisors share the mentoring/program development work.

Thesis supervisors and IS Academic Board members provide services to the program on an overload or service basis, without payment or teaching credit for their work. While versions of this arrangement have been in place since the program’s inception and have served the program well, the changing university environment suggests a need for expansion and some restructuring of the IS human resource complement.

Program Objectives

As one of UW’s early innovations, IS was conceived as a non-traditional university-based opportunity for students whose learning and education potential flourishes under a thesis-oriented mentorship model, in which they can take significant levels of responsibility for directing content and accomplishment in a supportive educational environment.

Distinctiveness/Benchmarking

The reviewers consider that the IS program is unique in Canada because of its “continued emphasis on one-to-one mentoring, self-directed learning, interdisciplinarity, and independent research”.

A89
Academic Programs Offered

Independent Studies offers the following plans:

- Bachelor of Independent Studies (BIS) – Three Year General degree;
- Bachelor of Independent Studies (BIS) – Four Year Honours degree as of Fall 2010;
- Concurrent degrees with IS are offered with Arts (BIS-BA); with Engineering (BIS – BASc);
  with Environment (BIS – BES); and with Science (BIS - BSc).

Students

IS is not well known either within UW or among potential students.

A recent survey of IS students and alumni revealed that the most frequent method of finding out about the program is through friends or social networks (45 per cent), followed by the UW/IS website (35 per cent). Among the 48 respondents to the survey only one learned of the program through regular UW recruitment channels.

IS tends to receive few applicants coming directly from high school. In the last three years only one student came directly from high school. The majority of successful applicants are transfer students or mature students. Of the alumni in a recent survey 82 per cent had some college or university education prior to entering IS. This figure is consistent with the 2001 survey that reported 80 per cent. Among current IS students 60 per cent had some form of advanced standing when they entered the program.

The admission procedures include meeting the standards set by the Faculty of Arts and, in addition, a personal statement from the applicant, a general application form, two letters of reference and an interview to ensure that he/she is well suited to the program. For entry in Fall 2009 IS received 64 applications – six were interviewed and five were admitted. Each year, from 2006-2007 to 2008-2009 inclusive, eight students have been admitted.

Prospective mature students with borderline high school records are required to register in at least one term of non-degree university courses in order to establish eligibility for acceptance to IS. UW’s approaches to Prior Learning Assessment are not highly developed and therefore students have to carry out non-degree activity. There has been discussion as to whether IS should cease to be a direct entry program. The Academic Board considers that the admission process of IS justifies the direct entry process.

Each IS degree has a two-phase structure – the pre-thesis phase (four or six terms) and the thesis phase (two terms). Historically many students have taken more than two terms to complete their thesis resulting in a relatively large number of inactive students in the thesis phase. Current practice is to maintain the flexibility of the programs, allowing for extended completion times when necessary, but to encourage timely completion.

In Fall 2009 there were 18 students enrolled in the pre-thesis phase plus six who were inactive. Six were enrolled in the thesis phase. An additional four thesis students were registered as inactive and/or were indicating serious intention to finish “soon”.

Fall term enrolments are typically in the 23 to 27 range; 23 in 2006 and 27 in 2008. This number appears to be fairly consistent over time. The system totals noted in the 2001 self study for the period 1990-2001 ranged from 18 to 30 with the annual average being 25 students.
In a recent survey 41 of 45 respondents (91 per cent) said that IS had met their expectations and 42 of 43 respondents (98 per cent) said that they would recommend the program to others. Weaknesses mentioned by the alumni were lack of work space (62 per cent) and the lack of scholarships (60 per cent).

The attrition rate at the last self study (2001) was 20 to 22 per cent. Since IS was incorporated into the Faculty of Arts the attrition rate has fallen to about 10 to 15 per cent.

Student representatives from the IS Student Society do meet with the Director on an unscheduled but regular basis to discuss issues of common concern.

Student involvement in IS management has a lengthy and important history. The program was founded with the ideal of collaborative decision-making among students, staff and “resource persons” regarding all aspects of the program. Conflict with the larger university was inevitable, since the central administration had actual powers of decision-making regarding major issues of policy, procedures and budget. Students and others associated with the program became well-known across the university during the 1970s and 1980s for their adversarial “anti-establishment” positions – a reputation which still survives in some parts of the university several decades later. The 2001 report tactfully summarized that period: “Some staff program coordinators and resource persons associated with IS during these periods were able to carry on within this conflicted ambience better than others, but there were episodes of sustained interpersonal hostilities that divided the student body and led to a less than optimal learning environment within IS.”

Senate reviews in 1985 and 1988 concluded that the original ideals were unworkable in the broader university context and that the complicated system of committees and meetings that had evolved during the first two decades of IS’s existence had to be dismantled. This led, in 1989-1990, to the decision to place all administrative and budget matters in the hands of the Director of IS. Since 2005, the Dean of the Faculty of Arts, through the Associate Dean of Co-op and Special Programs, has exercised direct involvement in administrative and budget matters of IS, although the Director retains discretion over administration within the program itself.

From 2006 to 2009, 26 students have graduated, from a low of four in both 2006 and 2008 to a high of 10 in 2009. The number of terms to complete the Three Year General degree (six terms) has varied from an average of seven for the 2006 graduating class, nine for the 2007 class, 12 for the 2008 class, and 19 for the 2009 class.

Of 23 recent IS graduates, half (11) were in graduate school. Of the 11 active in IS thesis-work in 2008-2009, eight expressed a desire to apply to graduate school. This finding, that at least half of recent graduates were of graduate-level academic quality, appears to be a slightly upward continuation of a well-established trend within the program. At the time of the 2001 review, of 103 graduates identified from 1990 to 2001, 52 had both thesis advisors concur in assessing the quality of the work as being equivalent to that of honours students or higher.

Of 54 alumni surveyed for the self study report, 15 were university professors, 15 were artists, musicians or self-employed, four were doctors, and the remainder were employed in various occupations.

**Faculty**

IS has no dedicated faculty members. Thesis supervisors and IS Academic Board members provide services to the program on an overload or service basis, without payment or teaching credit for their work. Because they come from other departments their research/scholarship is judged in their home department and not by IS.
IS has a Director who has a two-course buyout (20 per cent of load). Her term will end in 2011 and she plans to retire at that time.

The Director and two academic advisors, who are retired faculty members, share the mentoring and program development work for 25 to 30 full-time students. Stipends for advisors are roughly equivalent to a one-course buyout. Advisors are assigned to students in pairs (primary and secondary advisors) and work together on assigning grades and making recommendations to the Director regarding standards and progression.

There are 35 faculty members from UW (from 18 different departments representing all six Faculties), 11 non-UW faculty members from 11 institutions, three UW staff members, and four non-UW staff who are assisting IS students this year. Since 2001-2002, 147 UW faculty members have been involved as thesis advisors for IS students.

Main Strengths

The Bachelor of Independent Studies (BIS) is a Three Year General degree that is unique in Canada. It is a non-traditional university-based opportunity for students whose learning and education potential flourishes under a thesis-oriented mentorship model.

Concerns/Opportunities for Improvement

The review team’s report was generally positive regarding the program, noting:

“This niche program has remained successful and robust for over four decades, attracting a wide range of students, many of whom are extremely talented, and who have gone on to establish themselves in various fields”.

At its inception the IS program was highly inventive with its flexible structure and interdisciplinarity. Over the years, as the program evolved, it slowly gained more structure while at the same time remaining focussed on independent, interdisciplinary inquiry. It continues to seek the right balance between structure and independence with the recent adoption of a Four Year Honours program that provides more structure and direction to students than is found in the Three Year plan.

The reviewers recommend that IS “shift the pendulum more in the direction of increased structure” since enhanced structure ensures that the students are prepared for their research projects and makes them more competitive in seeking admission into various graduate programs.

In addition, the reviewers recommend that IS “reposition itself from what might be described as a “niche” program to become a “boutique” program, populated by students of the highest caliber (sic). However, in doing so, to avoid direct competition with the BKI program, it will be essential to narrow the recruitment base to students with at least one full year at the undergraduate level.”

To increase structure and move IS towards becoming a “boutique” program the reviewers offer 18 recommendations covering areas such as: admission requirements; program structure and curriculum; delivery mode; student progress; resources; and effectiveness in planning. They are:

Admission requirements and enrolment:

1. Distinguish itself from the BKI program by targeting students who either have a degree, or who wish to transfer from another program. The review team suggests that the requirement could be having at least one full year as an undergraduate prior to enrolment in the IS program.
2. Prevent students from moving to IS as a last resort or to simply complete a degree by establishing clear guidelines for admission, including a minimum grade point average (GPA) in the first year of university.

3. Require a high GPA and a clear rationale for moving to or joining the IS program. Additional letters of reference could be required to ensure that students would benefit from a rigorous period of focused study.

**Program structure and curriculum:**

4. Create a small set of mandatory courses that students would be expected to take as a group rather than individually. The courses should provide foundational skills for conducting independent research, and should enhance the capacity of students to build relationships and to work effectively in teams.

5. Ensure sufficient depth of knowledge is developed by requiring that certain courses be taken from academic departments. In some cases, it may be necessary to establish formal agreements with individual departments to ensure that IS students are allowed to take their courses.

**Mode of delivery:**

6. Supplement the current advising/mentoring system by assigning a faculty member to each student to oversee the student’s entire program, from ongoing term planning to thesis advising. It is important for the advisors to be formally recognized by their home departments for their contribution to the IS program.

7. Improve resources for students taking courses and conducting their research outside the university, continue with the development of a sophisticated web-based Community Learning Group.

8. Work together with the resources available in the university to create an array of web-based tools and media for students to use in their programs of study.

9. Establish a monitoring system to ensure that students, depending on their fields, are technologically current.

**Student progress:**

10. Develop a rigorous benchmarking methodology, including reliable quantitative measures, and better demonstrate that IS graduates achieve their degree level expectations by adopting numerical grades and eliminating the credit/no credit system.

11. Enhance the academic rigour and credibility of the program by reducing the value of the thesis to 40 per cent of the final year and stipulating that the remaining 60 per cent consist of course work either within the BIS program or outside in departmental units.

12. Provide greater certainty and guidance for students and improve record keeping and benchmarking by establishing clear timelines for completing the program, for both full-time and part-time students.

**Human, physical and financial resources:**

13. The directorship should be made a cross-appointed faculty position with 40 per cent of his/her time allocated to administrative duties. Ideally, the appointee should have an established research program in the pedagogy of independent, or self-directed, studies.

14. Ensure that academic advisors, thesis project supervisors, course advisors, and members of the Academic Board are recognized during the promotion and tenure review process for their teaching and service contributions to the IS program.
15. Expand the base of human resources in the IS program by further integrating well qualified UW faculty members into the program’s advising and teaching functions.

16. Enhance the value of the program and the students' sense of community by increasing the resources available for a speaker or workshop series that would bring students and faculty members together on a regular basis.

17. Supplement the current scholar in virtual residence initiative with a new regular scholar in residence program.

Effectiveness in planning:

18. The IS program should further develop its plans for offering a graduate program. A collaborative or an articulated program with other academic departments would be a helpful first step.

A key message underlying many of the review team’s recommendations for change was:

"It is important for the IS program to make the transition from a niche program to a recognizably elite program while retaining its identity and its constitutive features”.

**IS Response and Goals for 2010-2016**

With approvals for the Four Year Honours plan in place, and consistent with the goals and expectations for undergraduate programs identified in *Pursuing Global Excellence*, this plan focuses on student recruitment and enrolment; program structure and standards for excellence; resources (financial and physical); student and IS community engagement.

**Student Recruitment and Enrolment:** In recent years, enrolment in IS has been remarkably stable, at about 25 full-time students. Addition of the Four Year Honours plan in September 2010 is expected to increase the attractiveness of the program to potential students, however, promotional initiatives are also important. While the program is meant to be small, the goal is to increase that number to 50 by 2016.

The review team recommended that IS focus its promotion and marketing activities on transfer students and post-degree students, suggesting an admission requirement be at least one full year of undergraduate study in another post-secondary program. IS appreciates the rationale for this recommendation. Very few students graduating directly from high school have the maturity and focus necessary for success in the IS program; however IS does have a small but highly significant group of outstanding students entering with high school diplomas, most typically with interests in the creative arts. For the coming strategic plan period IS will maintain the BIS as a direct entry program with the understanding that normally students will enter after previous post-secondary experience. Entry directly from high school or with a high school diploma plus relevant informal educational experience will be at the discretion of the Admissions Committee and will be based on very clear evidence that the applicant has the required skills and self-discipline. *For the period 2010-2016, IS admissions’ information will note that students normally will have completed at least one full year of university education before entering the program, but that applications are invited from high school graduates interested in a focused program of self-directed studies. Recruitment and calendar materials will be amended in 2011 to include this information.*

The review team’s second and third recommendations in this area were to establish clear guidelines for admission, including a minimum GPA in the first year of university and high GPA requirements for transfer into the program. IS is in agreement with the team that it is not a “last resort” program, nor does IS wish to set students up for failure by admitting them to a program in which they are highly unlikely to succeed. People currently active in the program have responded that IS does have clear guidelines for admission,
including minimum averages for entry and for staying in the program and that the current Admissions Committee, admissions package and interview structure provide a rigorous screening mechanism. A number of current and former students responded to this recommendation, pointing out that a lower GPA is not always an accurate indicator of lack of aptitude, particularly for the unique students who find their way into the IS program. The goal is to maintain high standards for IS applicants, ensuring that they have the necessary skills and self-discipline to succeed in the program. Normally a GPA of over 70 per cent will be an admission requirement, however, at the discretion of the Admissions Committee, and with some evidence that the student has unrealized academic potential, exceptions may be made, allowing students to enter at the minimum level of 65 per cent.

A second goal is to continue to advocate for improved Prior Learning Assessment for mature students whose previous academic performance may have little current relevance in assessing their current academic potential.

Program Structure and Standards for Excellence: IS standards for excellence are of necessity flexible, however, the program includes a system of checks and balances meant to assure program quality that typically works very well and that serves as effective process standards.

The 2008 review of the IS curriculum, in connection with development of the Four Year Honours plan, has resulted in development of a core progression of courses that is meant to maintain the flexibility of the program while ensuring that the university’s standards for undergraduate degree level expectations with respect to depth and breadth of knowledge, methods, applications, communication, limitations and capacity have been addressed in the core IS curriculum. The Three Year progression (IS 100, IS 220, IS 310/320) offers maximum flexibility, with IS 100 and IS 220 being strongly recommended, but not required for all students. The Four Year progression (IS 100, IS 200, IS 330, IS 410/420) places more emphasis on core requirements as specified for Honours plans and creates a clear curricular distinction between the expectations and intended outcomes for the two plans. Plans for the 2010-2011 academic year include development of detailed syllabus material for new courses in the Four Year plan (IS 200, IS 330, IS 410/420), review and adjustment of the syllabus for IS 100 in order to meet the needs of both Three and Four Year plan students, review of and potential re-development of existing syllabus material for IS 220 and IS 310/320.

While Three Year plans are being phased out in many university programs, the intention is to maintain both plans concurrently for an initial period of three years in order to determine whether the unique nature of the IS program merits a continuation of the Three Year plan.

The goal is to implement the two plans (Three Year and Four Year) for at least the period 2010-2015, evaluating both plans in terms of process and outcome measures and adjusting them based on the first three years of academic experience with the two streams.

The review team has recommended that IS includes a small set of mandatory courses that will be taken in a group environment. Currently, IS has mandatory courses in the Four Year plan, but recommends (rather than requires) IS 100 and IS 220 for the Three Year plan students. IS anticipates that, by the end of this strategic plan period, the Three Year plan will either be phased out, or will have a similar structure of a minimal required core as the Four Year plan. Courses will be offered on an individual and small group basis, depending on the number of students who are required to take them in any term. If it does not prove to be feasible in the longer term to continue to offer courses on an individual basis, IS may need to move to Fall only admissions, which would facilitate offering core courses to small groups. Currently IS admits students in all three terms, with the result that they move through the program in very small cohorts. During the period 2010-2016, IS will evaluate the Three Year plan, assessing the desirability of plan continuation and, if continuation is desirable, introduction of required courses.
Part of the review team’s objective in recommending small group courses was to ensure that IS students were not isolated from peers and that they gain experience in team building. IS addresses this concern below in Student and Community Engagement.

The review team also recommended that IS students be required to take “certain courses” from various academic departments, in order to ensure adequate depth of knowledge in identified areas of focus. While IS agrees with the reviewers that students need to have a good balance of IS and regular program courses, the diverse areas of focus and longer term goals of IS students make it difficult to determine how those courses would be selected. For example, IS students headed for graduate school are currently strongly encouraged by their academic advisors to take a good selection of regular university courses in their main area(s) of intended graduate study, however the number and type of such courses vary widely. The role of the academic advisor is critical here, as is the system of checks and balances within the program designed to support student excellence.

With respect to student progress, the review team recommended development of a “rigorous benchmarking methodology” to better demonstrate that IS graduates achieve degree level expectations. The team also recommended clarifying expectations for program completion, establishing clear timelines for program completion for both full-time and part-time students.

Plans for 2010-2016 include reviewing IS’s procedures in order to ensure that the system of checks and balances is effective in supporting program excellence while being administratively efficient and facilitating the potential for positive student outcomes in the program.

Another review team recommendation was to reduce the value of the IS thesis to four half courses during the final year, rather than the current 10. This has been the most contentious of the recommendations in subsequent discussion. One submission in response to this recommendation suggested: “A reasonable idea, but again, some flexibility for individual cases would be useful... A flexible range of weights would work well”. Others were less sanguine. In general, there is a strong desire at this point to retain the full thesis option among most people responding to the team’s report.

Plans (2010-2013/14) for identifying process and outcome measures include continuing investigation of other “alternative” approaches to undergraduate education in order to establish relevant benchmark measures and comparatives. This investigation will include an analysis of the implications of a possible shift to a “range of weights” for the thesis project.

Other plans (2010-2013/14), in connection with evaluation of the IS program following implementation of the Four Year stream include investigating the potential for developing joint Honours and/or other articulated relationships with selected UW undergraduate programs that have a strongly interdisciplinary emphasis (Knowledge Integration, Environment and Resource Studies for example) and developing a Master’s degree and/or articulated relationships with existing interdisciplinary Master degrees. The review team report recommends development of an IS graduate program, suggesting that a collaborative program with another department would be a good first step.

Resources: There has been erosion and fluctuation of financial resources available to IS over the past decade, which has had a significant impact and which adds further emphasis to concerns expressed at the time of the last review (2001) about resource allocations to IS.

One goal is to increase the budget so that the position, IS Administrative Assistant, becomes full-time before the program enrolment reaches 50 students.
A second goal is to develop a joint appointment arrangement so that the IS Director becomes a continuing salaried position as part of the job description of a regular UW faculty member.

The review team’s report suggested that the directorship should be a regular faculty appointment with 40 per cent off for administrative duties in IS. Until a joint appointment arrangement can be made, future plans (2011-) include increasing the budget available for the IS Director to allow for a three-course annual buyout or equivalent and negotiation for administrative credit or stipend or both for the IS Director by the time that the current Director’s term ends in Spring 2011.

Thesis supervisors, course supervisors and IS Academic Board members provide services to the program on an overload or service basis, without payment or teaching credit for their work. While versions of this arrangement have been in place since the program’s inception and have served the program remarkably well, the changing university environment (e.g. rising workloads among regular faculty members and increasing constraints on financial resources) suggests a need for expansion and some restructuring of the IS human resource complement. The current IS budget offers limited flexibility and places constraints on capacity. The review team’s report recommends that advisors, supervisors and members of the Academic Board should all receive recognition for their work not only in the category of Service, but also in Teaching.

A third goal is to increase the complement of IS advisors to five by the time the program enrolment reaches 50 students, finding new budgetary resources for this as students numbers increase. Currently, three advisors share the mentoring of 25-30 full-time students and a number of part-time students. Historically, each advisor has carried a complement of 10 full-time students, meeting individually with students on a weekly basis, mentoring and supervising them on all aspects of program and course planning and selection, ensuring reporting and submission of required forms and documents, and providing significant amounts of general academic advising. Stipends for advisors are roughly equivalent to a one-course annual buyout. During the period 2010-2012, plans include investigation of approaches to enhancing IS resources to allow for addition of at least one additional advisor while allowing also for accomplishment of the first and second goals above.

A fourth goal is to investigate ways to provide increased recognition to IS thesis and course supervisors. This is a challenging issue, since it is governed by a larger incentive structure which does not reward faculty members for extra teaching, in particular for overload work with students who are not registered within their home departments. The IS budget does not allow for meaningful financial incentives or for provision of research assistance to supervisors. In early 2009, the IS Academic Board members met to discuss this issue and were unable to identify a clear course of action.

A related recommendation is: “Expand the base of human resources in the IS program by further integrating well qualified UW instructional staff into the program’s advising and teaching functions”.

Plans for 2010-2011 include a Spring term “think-tank” for Board members and friends of IS to address this issue and others that require “out of the box” thinking.

Physical Resources: Physical resources are also a matter of concern for IS.

The goal of IS is to occupy attractive, accessible, useful on-campus space that meets the needs of IS students, staff and faculty members for individual and group workspace, small group meetings, private consultations between students and advisors or staff, storage and informal interaction.

A new space in East Campus Hall has been identified for IS that will meet the identified minimum program needs for: four offices, student gathering space, local storage, access to washrooms and offices for people with mobility limitations, with a proposed move-in date of Spring 2010. While the new space is an improvement over the interim space assigned previously, some important IS space needs have not
been addressed by the proposed move. Future plans (2011-2014) include addition of at least one more office for advisor/students meetings, expansion of IS student gathering/workspace, arranging for regular access to identified meeting rooms in close proximity to the new space that can be used for IS Board meetings, IS student presentations and other IS events, and identification of IS “gallery space” for display of IS student work.

IS Student and Community Engagement: For IS students who take courses from programs across campus and/or on a self-directed basis and who frequently work on a one-to-one basis with faculty members, the potential for isolation does exist. A sense of engagement with an academic community is important for academic success and personal well-being for students in post-secondary programs. The review team report recommends additional resources for “a speaker or workshop series that would bring students and faculty together on a regular basis”.

In recognition of the importance of community engagement, IS’s goal is to offer annually at least two specific initiatives aimed at enhanced engagement opportunities for members of the IS community. [The identified IS Community includes current, former and potential IS students; faculty from UW and elsewhere who have been or are involved with IS students as program advisors, course supervisors and thesis supervisors; current and past IS Board members; the IS staff (Program Assistant and Director); other “friends” of IS.]

Current community engagement initiatives include changes to the website, ongoing management of a Facebook presence by members of the IS Student Society and, in addition, development of a linked Community Learning Group that makes use of available learning technologies. In 2009, the architecture of the Community Learning Group was developed and a prototype, using the University of Waterloo platform UW-ACE, was also developed as a means of allowing IS students and staff to investigate its potential. The review team made three recommendations in this area, suggesting:

“Improve resources for students taking courses and conducting their research outside the university....”

“Create an array of web-based tools and media for students...”

“...ensure that students...are technologically current”.

Plans for 2010-2017 include completion of the development phase of the Community Learning Group and its implementation as an ongoing defined interactive virtual space for discussion, information exchange and resource access by members of the IS Community and various temporary and ongoing subgroups within it. Related to this is continued investigation of learning technologies useful to IS students, particularly those working at a distance from the university.

Establishment of an IS Visiting Scholar in Virtual Residence program took place in conjunction with IS’s 40th Anniversary in 2009. The review team report recommends supplementing the program with a regular scholar in residence program and advocates a modest addition to the IS budget to support such a venture. Future plans (2010-) include continuation of the IS Visiting Scholar in Virtual Residence program, complementing a primarily virtual structure with special occasional on-campus events, organized in co-operation with the UW Bookstore and other relevant UW academic programs. In addition, IS will investigate establishment of a regular scholar in residence program, drawing primarily on IS alumni.
FOR INFORMATION

Policies 70 and 71 (Student Petitions and Grievances and Student Discipline) require UCSA to report annually to Senate on the number of cases heard at the university and faculty levels, their nature and such recommendations as it sees fit to make with respect to matters under its jurisdiction. Included is a summary of activity and related matters for September 2008 - August 2009.

In an attempt to preserve confidentiality, cases are not reported by faculty, unit or program. Annual summaries (with identifying student and faculty names removed) of discipline cases, grievances and appeals are posted to the Secretariat’s website; www.secretariat.uwaterloo.ca/students/infoforstudents.htm.

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<tr>
<td>Total for Non-academic offences</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Number of students involved</td>
<td>617</td>
<td>781</td>
</tr>
<tr>
<td>UW enrolment/ Annual FTEs</td>
<td>23,142</td>
<td>24,891</td>
</tr>
</tbody>
</table>
Cheating
(cheating, unauthorized co-operation or collaboration, unauthorized aids or assistance, unauthorized resubmission of work, violation of exam regulations, impersonation, theft of intellectual property)

<table>
<thead>
<tr>
<th>undergraduates: year of study</th>
<th>non- and post-degree</th>
<th>graduate students</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>285</td>
<td>126</td>
<td>56</td>
</tr>
<tr>
<td>2008-09</td>
<td>360</td>
<td>173</td>
<td>73</td>
</tr>
<tr>
<td>2\textsuperscript{nd} offence (08-09)</td>
<td>22</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>3\textsuperscript{rd} offence (08-09)</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4\textsuperscript{th} offence (08-09)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Plagiarism

<table>
<thead>
<tr>
<th>undergraduates: year of study</th>
<th>non- and post-degree</th>
<th>graduate students</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-08</td>
<td>22</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>2008-09</td>
<td>23</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>2\textsuperscript{nd} offence (08-09)</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3\textsuperscript{rd} offence (08-09)</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Grievances

<table>
<thead>
<tr>
<th>Type</th>
<th>Successful</th>
<th>Unsuccessful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfair testing procedures</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grade reassessment</td>
<td>3</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Unfair practices</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Exemption from a rule</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Appeals to Faculty Committees for Student Appeals and University Committee for Student Appeals

<table>
<thead>
<tr>
<th></th>
<th>Successful</th>
<th>Penalty Altered</th>
<th>Unsuccessful</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCSAs (2007-08)</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>UCSA (2007-08)</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>FCSAs (2008-09)</td>
<td>5</td>
<td>11</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>UCSA (2008-09)</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
As in years past, UCSA stresses that students are responsible members of the university community and that the conduct of the vast majority is exemplary. When considered in light of the total UW student body, few disciplinary actions or instances of misconduct are reported. Seven hundred and eighty-one undergraduates were involved in offences in 2008-09 representing 3.1% of the undergraduate student body; an increase of 0.4% from the previous year.

**Offences**
The upward trend in the number of cheating offences reported over the last few years continues. Cheating offences in 2005-06 numbered 407, 491 in 2006-07, 524 in 2007-08 and 638 in 2008-09. These numbers represent 1.9%, 2.2%, 2.3% and 2.6% of the total undergraduate student FTE enrolment in 2005-06, 2006-07, 2007-08 and 2008-09 respectively.

The main cheating offences by undergraduates in 2008-09 are “unauthorized co-operation or collaboration” and “unauthorized resubmission of work”. These terms, and the other specific terms mentioned in this report, are defined in the Glossary to Policy 71 Student Discipline. Fifty-six per cent of all cheating at the undergraduate level occurs in year 1 and decreases steadily to year 4. However, the number of second offences for cheating by undergraduates stays at the same level from year 1 to year 3.

Plagiarism offences, in the last year, have increased at both the undergraduate and graduate levels. The increase at the graduate level is a result of better reporting to the Secretariat. Plagiarism at the undergraduate level increased by 39% from last year and, like cheating, does not decline until year 4.

In 2008-09 there were 34 appeals, 28 to Faculty Committees on Student Appeals and six to the University Committee on Student Appeals. Five were successful at the faculty level and none at the university level.

*Geoff McBoyle*  
Chair, UCSA  
*April 23/10*
FOR APPROVAL

Department Name Change

Motion:
That Senate approve the following name change: “Department of Sociology” to the “Department of Sociology and Legal Studies,” subject to approval at the May 11, 2010 meeting of the Arts Faculty Council.

Background:
Since its creation in 2004, the Legal Studies program has grown rapidly in terms of declared majors, such that there is now the need for a departmental home. The Department of Sociology intends to reorganize in order to administer the Legal Studies program and to provide support and services to students enrolled in the program through UW; St. Jerome's University will continue to provide support and services to its students enrolled in Legal Studies. A name change will accurately reflect the reorganization of the department and the programs available. At a meeting on October 23, 2009, department members voted in favour of an official name change to the Department of Sociology and Legal Studies.

At its meeting on November 24, 2009, the Arts Faculty Executive Committee agreed to recommend this name change to the Arts Faculty Council for approval. Arts Faculty Council will consider the name change at its May 11, 2010 meeting.

Ken S. Coates
Dean, Faculty of Arts