

SIMON FRASER UNIVERSITY
Office of the Vice-President, Academic

MEMORANDUM

TO: Members of Senate

FROM: John Waterhouse, Chair
SCEMP

RE: SCEMP Motions on the Final Report
of the Course Accessibility Task Force

DATE: June 17, 2003

The establishment of a Course Accessibility Task Force (CATF) was recommended by the Ad Hoc Senate Committee to Review and Develop the Undergraduate Curricula (UCC), which delivered its report to Senate in October, 2002. The UCC felt strongly that issues around course accessibility should be addressed before the writing, quantitative and breadth requirements are successfully introduced. The enabling motion was passed by Senate on October 7, 2002, and a Task Force was subsequently created, and began meeting in February, 2003.

The chief aim of the CATF is to improve access and, in doing so, ensure that the quality of an SFU education is maintained. Specifically, the CATF mandate was to *"review and make recommendations to address the issues of undergraduate course availability, accessibility and timely completion in accordance with the recommendations of the Ad Hoc Committee."* The specific tasks and responsibilities of the CATF were to:

- Examine whether course accessibility is an issue;
- Determine the causes of the problem;
- Recommend a course of action to remedy the problem.

In accordance with its terms of reference (attached), the CATF submitted its final report to the Senate Committee on Enrollment Management and Planning (SCEMP) for consideration at its June 11, 2003 meeting. In addition, the CATF chose to provide the Senate Committee on University Priorities (SCUP) with a copy of their final report for information. SCEMP has chosen to recommend five motions in relation to the twenty-two recommendations contained within the Task Force's Report.

The Senate Committee on Enrollment Management and Planning unanimously recommends consideration of the following five motions for approval by Senate:

Motion 1

It is moved that Senate authorize the Vice-President, Academic to establish an Ad Hoc Steering Committee to:

- oversee the implementation of the recommendations of the Course Accessibility Task Force;
- create monitoring and evaluative mechanisms to assess the impact of the measures taken to address course accessibility;
- review departmental plans on how CATF recommendations will be implemented and to provide advice/comment where appropriate;

- explore additional areas and ideas to address course accessibility issues including, but not limited to, irregular time-tabling patterns, multi-semester scheduling, alternative methods of course delivery, and constraints on the development and offering of distance education courses etc.
- communicate and work with the University community in relation to course accessibility.

The suggested membership of the Steering Committee is as follows:

- Chair (appointed from the Faculty representatives)
- Faculty member representative from each of the faculties
- 1 staff representative from the Registrar's Office
- 1 staff representative
- 1 senior undergraduate student
- Director, Academic Planning
- Director, Analytical Studies or designate

Motion 2

It is moved that Senate direct the Ad Hoc Steering Committee on Course Accessibility to develop a scheduling policy for the approval of Senate that will make greater use of currently unpopular times and days, and the summer semester, with implementation of this recommendation to begin Fall 2004 or earlier.

Motion 3

It is moved that Senate direct that all programs, in consultation with the Senate Committee on Undergraduate Studies (SCUS) review program regulations and pre-requisite requirements and modify or delete any with weak justification that create barriers to course access.

Motion 4

Tabled to Sept 03 Senate Meeting

It is moved that Senate encourage the Vice-President, Academic to seek resources for additional base-budgeted resources for CFL positions and TA funding.

Motion 5

It is moved that Senate expresses deep concern about the increasing shortage of classroom facilities and advises the Board of Governors that the construction of additional instructional space be given high priority in future capital planning for the University and that conversion of existing classroom space to other uses be resisted.

Attachments: Course Accessibility Task Force Terms of Reference
Report of the Course Accessibility Task Force

c. Members of the CATF

Course Accessibility Task Force Terms of Reference

Mandate

To review and make recommendations to address the issues of undergraduate course availability, accessibility and timely completion in accordance with the recommendations of the Ad Hoc Senate Committee to Review and Develop the Undergraduate Curricula and the related motion passed at the October 7, 2002 meeting of Senate.

Reporting Structure

The Course Accessibility Task Force reports to the Senate Committee on Enrollment Management and Planning (SEMP).

Membership

Roger Blackman, Chair

2 Faculty Representatives (appointed by the VP Academic)

- Larry Weldon, Faculty of Science
- Rob Gordon, Faculty of Arts

Director, Analytical Studies

- Walter Wattamaniuk

1 Staff Representative from the Registrar's Office

- Diane Whiteley, Director of Records and Admissions

1 Senior Staff Representative from Faculties or Departments

- Sherrill King, Economics

1 Senior Undergraduate Student (appointed by the VP Academic)

David Cross

Director, Academic Planning

Laurie Summers

Coordinator, Undergraduate Curriculum Implementation Coordinator

K.C. Bell

Timeline for the Task Force

The Task Force is expected to undertake and to complete its work during the Spring 2003 term and to provide a final report to June 2003 Senate meeting.

Frequency of Meetings

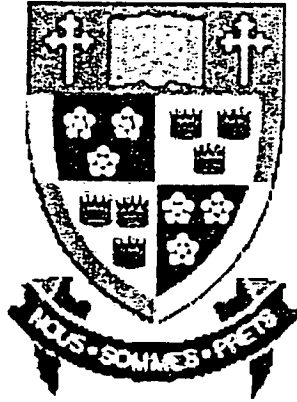
Bi-weekly

Specific Tasks and Responsibilities

The task force will be asked to focus on the following areas of concern:

- Examine whether course accessibility is an issue;
- Determine the causes of the problem;
- Recommend a course of action to remedy the problem.

Simon Fraser University



REPORT OF THE COURSE ACCESSIBILITY TASK FORCE

June 3, 2003

Chair: Roger Blackman, Associate Dean, Faculty of Arts

Members: Larry Weldon, Faculty of Science
Rob Gordon, Faculty of Arts
Walt Wattamaniuk, Director, Analytical Studies
Diane Whiteley, Director of Records and Admissions
Sherrill King, Departmental Assistant, Department of Economics
David Cross, Undergraduate Student
Laurie Summers, Director, Academic Planning
KC Bell, Undergraduate Curriculum Implementation Coordinator

REPORT OF THE COURSE ACCESSIBILITY TASK FORCE

Previous committees that have examined the SFU undergraduate curricula have made numerous recommendations concerning the accessibility and efficiency of the curricula, course availability and timely completion by students of requirements. Despite these recommendations, course accessibility remains a problem, as evidenced by four indicators:

- The number of course full turnaways per student in each Fall semester. Between 1994 – 2002 this went from 1.25 to 1.71;
- The number of course spaces available per course enrollment. Between 1994 – 2002 this went from 1.26 to 1.18;
- The percentage of students able to get the number of courses they wanted. Between 1994 – 2001 this went from 89% to 87%;
- The percentage of students able to get the specific courses they wanted. Between 1994 – 2001 this went from 64% to 58%.

Further detailed information on course availability indicators as well as classroom usage statistics, is contained in Appendix I. A review of past reports suggests that the obstacles to better access have been accurately identified and appropriate solutions offered. The key to decisively addressing the issue is to implement the recommendations put forward.

At Simon Fraser, some departments mount service courses that are taken by students from many different disciplines. Moreover, there is a plethora of interdisciplinary programs that require the meshing of different curricula. Add to that the trimester structure, and the fact that the average SFU student load varies considerably, and assuring course accessibility becomes an immense challenge. The nature and extent of the ongoing course accessibility problem is further illustrated by the course-full-turnaway and student completion rates shown in Appendix I.

The establishment of a Course Accessibility Task Force (CATF) was recommended by the Ad Hoc Senate Committee to Review and Develop the Undergraduate Curricula (UCC), which delivered its report to Senate in October, 2002. The UCC felt strongly that issues around course accessibility would need to be addressed before the writing, quantitative and breadth requirements could be successfully introduced. The enabling motion was passed by Senate on October 7, 2002, and the Vice-President Academic created the Task Force.

The chief aim of the CATF is to improve access and, in doing so, ensure that the quality of an SFU education is maintained. Specifically, the CATF mandate was to *"review and make recommendations to address the issues of undergraduate course availability, accessibility and timely completion in accordance with the recommendations of the Ad Hoc Committee."* The tasks and responsibilities of

the CATF were to:

- Examine whether course accessibility is an issue;
- Determine the causes of the problem;
- Recommend a course of action to remedy the problem.

The CATF began its work by listing all aspects of curriculum, scheduling, registration and course delivery that appeared to constitute a *prima facie* limitation to course access. This list formed the basis of a questionnaire sent to all departments, schools and non-departmentalized faculties in March, 2003 (see Appendix 3 for the questionnaire and Appendix 4 for a summary of responses). That resulted in the identification of limitations and barriers to course accessibility at the system, faculty, program, instructor and student level (see Appendix 2 for the discussion paper).

The many limitations to course access identified in the discussion paper can be viewed as obstacles to achieving an optimal balance between teaching supply and student demand. As a result of its research, consultation and discussion, the CATF has developed a series of recommendations designed to improve course accessibility.

I. Classroom Facilities

Recommendation 1.0

New building plans must give high priority to classroom space, particularly in the mid-large range. Every time a new building is planned, a specific demand analysis must be conducted regarding classroom space. At a minimum, one additional 450 seat lecture theatre needs to be constructed on the Burnaby campus within the next three years.

Rationale: With the current projected growth of student FTEs on the Burnaby campus within the next three years, the University will require this facility to meet the demand for this size of classroom.

Recommendation 1.1

Conversion of classroom space to other uses must be resisted, and efforts should be made to create additional classrooms when current space assignments are changed.

Rationale: In order for the University to meet its demands for teaching space, existing classroom space must be protected from conversion to alternative uses, and where possible space should be converted to classroom use.

2. Scheduling

Recommendation 2.0

Scheduling of classes must make greater use of currently unpopular times and days (e.g. 8:30 – 9:30 am, Fridays and evenings).

Rationale: The instructional hours of the University are 8:30 am – 10:30 pm, Monday to Friday. A “flattening” of the day/time classroom usage patterns through more frequent scheduling of classes at currently unpopular periods would create more scheduling opportunities.

Recommendation 2.1

Departments should increase summer semester course offerings.

Rationale: Increasing summer course capacity would reduce demand on overextended facilities in the Fall and Spring semesters and would make the summer a more attractive semester in terms of offerings for students.

Recommendation 2.2

When scheduling courses and distributing instructional capacity across them, departments should review enrolment history and strive to match their course selection and capacity allocation to the predicted pattern of student demand.

Rationale: In order to appropriately allocate instructional resources, departments need to be aware of and respond to patterns of student demand.

Recommendation 2.3

Consideration should be given to the development of cohort based programs.

Rationale: Cohort programs would enable departments to better predict and accommodate course demand and could provide students with a schedule that guaranteed access.

Recommendation 2.4

Programs with interlocking or interacting program requirements should consult when scheduling so as to avoid course overlap.

Rationale: Coordinated scheduling will provide students with improved course access and more timely completion of their program requirements.

3. Teaching and Pedagogy

Recommendation 3.0

In conjunction with the Learning and Instructional Development Centre, e-Linc and the Centre for Distance Education, departments need to explore ways to promote the use of non-face-to-face teaching.

Rationale: Non-face-to-face teaching would reduce the demand on physical campus facilities and introduce more flexibility into student and faculty schedules.

Recommendation 3.1

Departments should consider adopting alternative course delivery methods such as taped lectures moderated by TAs, use of a unit mastery system with voluntary lectures and drop-in tutorial sessions, and the use of small group seminars instead of large lectures.

Rationale: Use of alternative delivery modalities would reduce demand on facilities, particularly large lecture theatres, and provide students with alternative and flexible ways of learning.

4. Registration

Recommendation 4.0

The criteria used in the Registration Priority Number (RPN) system should be re-examined and if necessary adjusted to improve the overall fairness and efficiency of the system.

Rationale: The aim of the RPN system is to provide greater equity and fairness for students during the registration process. Therefore, a re-examination of the system to ensure that it is still working in the best interests of the students would be appropriate.

5. Human and Fiscal Resources

Recommendation 5.0

The University must continue its commitment to provide additional base-budgeted resources for CFL positions.

Rationale: Adding continuing faculty (CFL tenure-track, Lecturers and Lab Instructors) increases the pool of experienced teaching and research faculty as well as providing supervisors for graduate students. By reducing the University's reliance on sessional instructors, a greater predictability in scheduling can also be achieved.

Recommendation 5.1

The University Administration must continue to make increased base-budgeted TA funding available.

Rationale: Enhanced TA allocations would enable programs to increase the number of sections offered, particularly in the large-capacity lower division offerings that are experiencing high levels of course-full-turnaway.

Recommendation 5.2

The Dean of Graduate Studies is encouraged to promote the recently established Certificate Program in University Teaching and Learning for PhD students.

Rationale: For those PhD students in the latter stages of their program and who are contemplating a career that includes teaching, this program would allow them to obtain instructional training and experience and provide the University with a supply of well-qualified short-term instructors.

Recommendation 5.3

Faculties and Programs should more actively consider bundling individual sessional instructor positions to allow for full-load and partial-load limited term lecturer appointments.

Rationale: This would provide these instructors with a more favorable level of compensation and provide departments with improved continuity in teaching and scheduling.

Recommendation 5.4

Chairs should encourage the expectation among continuing faculty members (especially at the time of their appointment) that they share the responsibility for teaching lower division courses as well as being available to teach at less popular times during the regular university instructional hours in all three semesters.

Rationale: Acceptance of this expectation would help chairs meet the considerable challenge of creating a course schedule that better serves student needs.

Recommendation 5.5

Deans should ensure that teaching reductions are fairly distributed and are approved only when warranted by excessive demands on the faculty member in other areas.

Rationale: Teaching reductions for research or administrative reasons deprive students of contact with the University's best teachers and researchers. They also add to the difficulties faced by Chairs as they attempt to establish a predictable and comprehensive teaching schedule, since a greater reliance must be placed on short-term instructors.

6. Program Design

Recommendation 6.0

All programs should review the regulations and requirements for their undergraduate credentials and eliminate those with weak or outdated justification.

Rationale: Excessive and unnecessary program regulations and prerequisite requirements increase student completion times and lead to greater complexity and restrictions in the scheduling and registration processes for departments and students.

Recommendation 6.1

Departments should ensure that students from other programs can gain reasonable access to their upper division courses and that there are upper division courses without excessive pre-requisite requirements available.

Rationale: Majors and honours students from other programs require upper division courses to complete their requirements. With the forthcoming introduction of the undergraduate breadth requirements, access to courses in other programs will become an even more critical issue for students.

7. Implementation of Recommendations

With the submission of its final report, the CATF will have completed its mandate. Some of its recommendations, if approved, can be implemented immediately. Others may need further discussion and elaboration before they can be applied. The CATF proposes that prompt action should be taken on the following six recommendations:

Recommendation 1.0 – Classroom Space
Recommendation 1.1 – Classroom Space
Recommendation 2.0 – Scheduling
Recommendation 2.1 – Scheduling
Recommendation 5.0 – Human and Fiscal Resources
Recommendation 5.1 – Human and Fiscal Resources

In addition, the CATF recommends the following specific actions be undertaken with respect to implementation:

Recommendation 7.0

Establish an Ad Hoc Steering Committee, reporting to SCUP, to guide the implementation and evaluation of the course accessibility recommendations and to communicate with the University community.

Recommendation 7.1

The work to implement those recommendations identified as being of the highest priority should begin no later than January 2004.

Recommendation 7.2

Departments should be required to provide a plan to their Dean proposing how they intend to implement the CATF recommendations who in turn will forward it

to the Vice-President, Academic.

Recommendation 7.3

A monitoring system needs to be established to ensure that the measures designed to improve course accessibility are in fact working and that those that fail are revised or replaced. For example, the administration should continue to measure the proportion of students who report failing to register in the number of courses they were seeking and determine whether the changes designed to enhance access improve this key index of accessibility. In addition, tools such as student polls and wait lists should also be utilized to ensure that immediate feedback is obtained. This is particularly important since the new SIMS does not have the capacity to record course-full-turnaways.

8. Issues for Future Consideration

The issues contained in this section were identified by the CATF as important additional areas that should be further explored by the Ad Hoc Steering Committee:

- Departments should consider expanding the current practice of listing courses to be given in future semesters to full multi-semester scheduling.

Multi-semester scheduling would allow the collection of information from students that supplied a better basis for predicting demand and therefore more appropriate resource allocation decisions. Students, departments and instructors would all stand to benefit if the full course schedule was known 2-3 semesters in advance. However, that benefit would be realized only if there were few changes to the planned schedule.

- If full multi-semester scheduling could be achieved, that can provide a basis for introducing multi-semester registration.
- The University should consider establishing a goal of increasing overall summer enrollments from the current 20% to 25%.
- The University should revisit the budget-mandated 10% cap on distance education enrollments and look at decreasing the constraints on growth for non face to face instruction.
- Prior to the introduction of the undergraduate Writing (W), Quantitative (Q) and Breadth (B) requirements, appropriate planning must be undertaken to ensure that an accessible and adequate number and selection of W, Q and B courses are available to students.

APPENDICES

- I. Statistical Information
- II. Discussion Paper: Course Access Limitations
- III. Course Accessibility Task Force Questionnaire
(available on request)
- IV. Course Accessibility Task Force Final Summary
of Questionnaire Responses
(available on request)

APPENDIX I

STATISTICAL INFORMATION

COURSE AVAILABILITY INDICATORS

Undergraduate students at SFU have found it increasingly more difficult to register in the number and specific courses they want.

Four indicators are used to measure availability of undergraduate courses. The first is the number of course full turnaways per student in each fall semester (A).

The second is available course spaces per course enrollment (B), which is a measure of utilization.

The third (C) is the % of the 1,200 students we survey each fall who indicated that they were able to get the number of courses they wanted.

The fourth is the % of the 1,200 students we survey each fall who indicated that they were able to get all the specific courses they wanted.

Unfortunately we did not do the survey last fall.

As shown below, the first three indicators have been pretty steady over the tuition freeze, except for last fall, which was the first semester out of the freeze, when a whole bunch more students accepted our offers than we thought.

The fourth indicator has been steadily dropping, which means that students are having a harder time getting the specific courses they want.

<u>Fall Semester</u>	<u>Fall UG Headcount</u>	<u>Fall Course Full Turnaways</u>	<u>Course Enrollment</u>	<u>Course Spaces</u>
1994	15,904	19,949	47,635	60,158
1995	15,890	21,131	48,313	58,573
1996	16,032	20,536	50,508	60,925
1997	16,220	20,883	49,642	60,333
1998	16,562	19,972	50,104	60,285
1999	16,180	20,216	47,796	58,676
2000	16,757	20,541	49,977	60,717
2001	17,141	20,802	51,748	62,072
2002	18,240	31,248	54,630	64,313

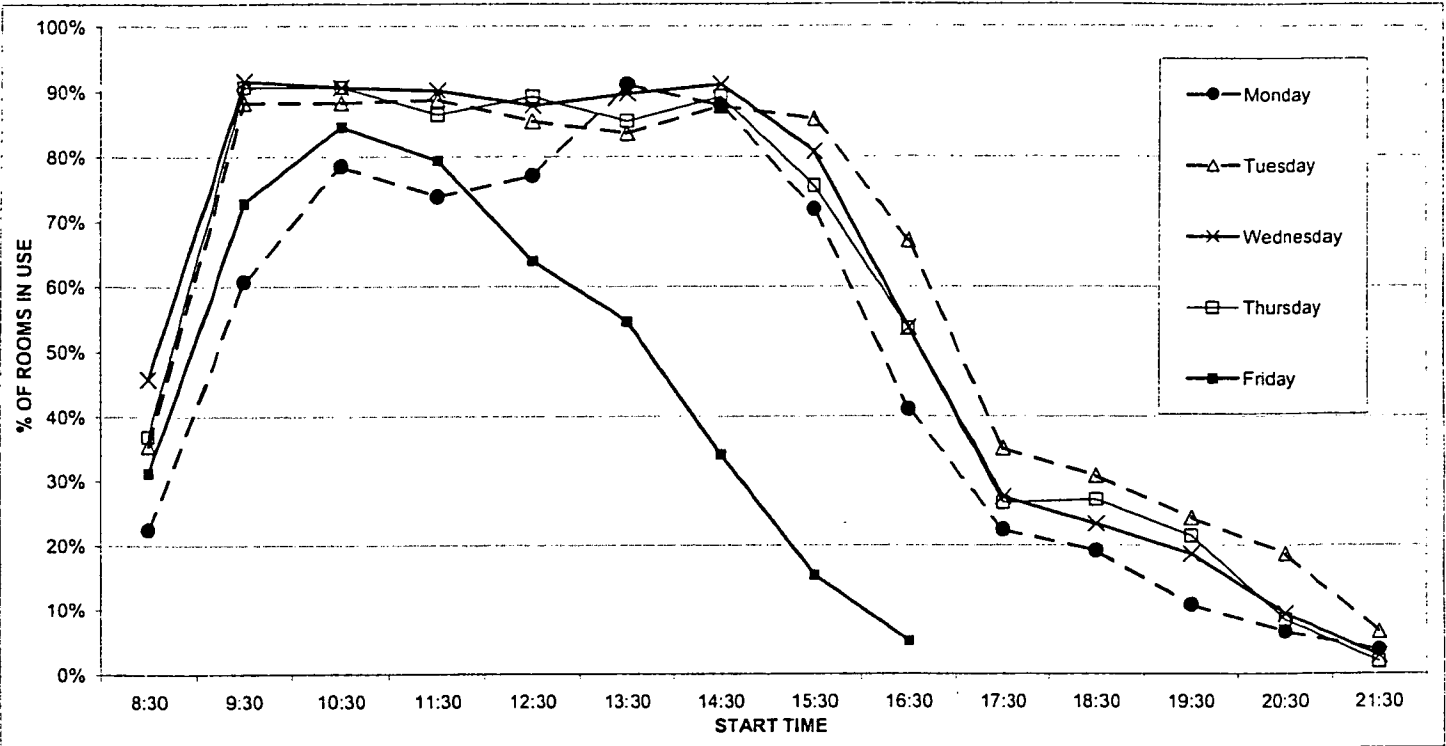
	<u>(A) Fall Course Full Turnaways per Student</u>	<u>(B) Course Spaces Available per Course Enrollment</u>	<u>(C) % of Students Able to get No. of Courses wanted</u>	<u>(D) % of Students Able to get Specific Courses wanted</u>
1994	1.25	1.26	89%	64%
1995	1.33	1.21	89%	62%
1996	1.28	1.21	86%	62%
1997	1.29	1.22	89%	65%
1998	1.21	1.20	89%	60%
1999	1.25	1.23	87%	60%
2000	1.23	1.21	86%	59%
2001	1.21	1.20	87%	58%
2002	1.71	1.18	survey not administered	

Classroom Utilization by Room Type, Day, and Time Slot
FALL 2002

Room Type: ALL

CENTRALLY SCHEDULED

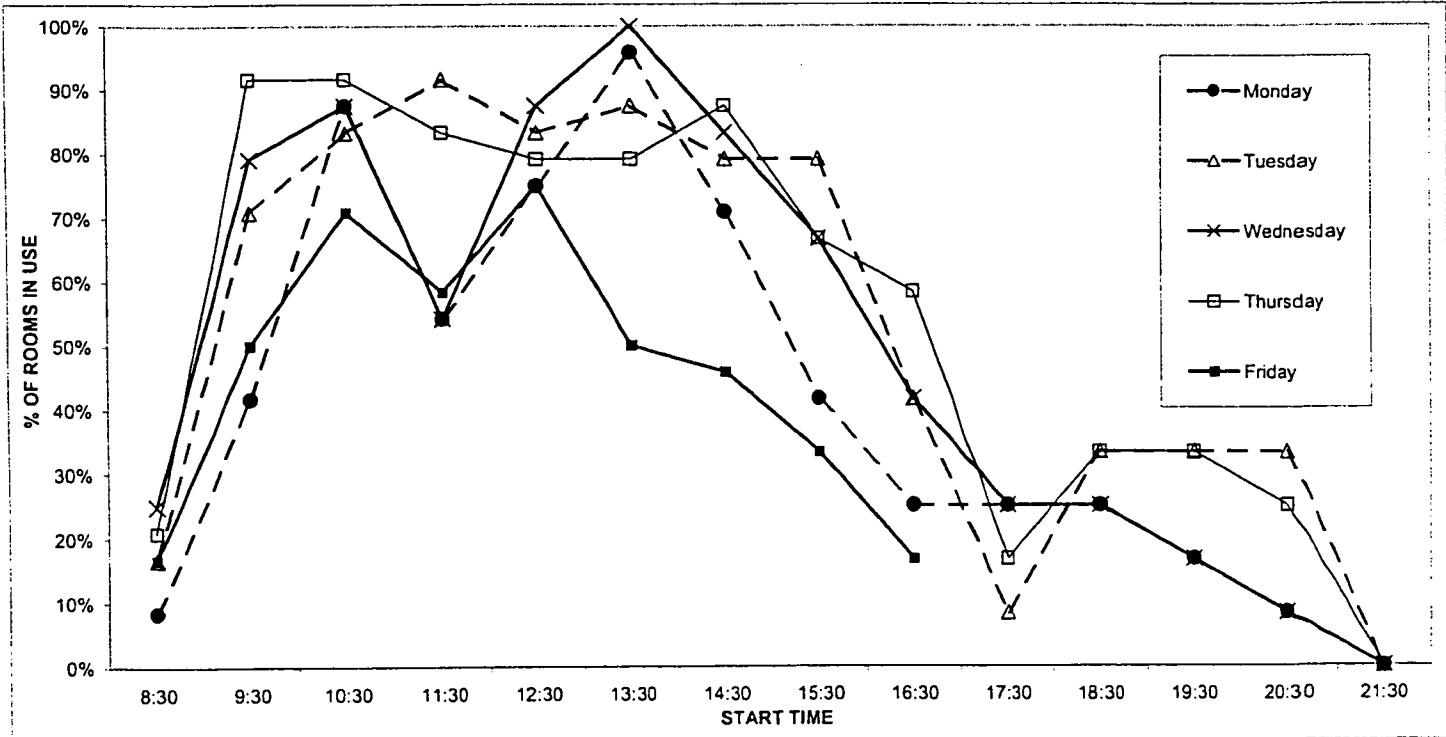
Utilization of all 107 Rooms Assigned to the Registrar's Office, As of Fall 2002



Room Type: Lecture + Policy Rooms

CENTRALLY SCHEDULED

Utilization of the 20 Lecture and Policy Classrooms Assigned to the Registrar's Office, As of Fall 2002

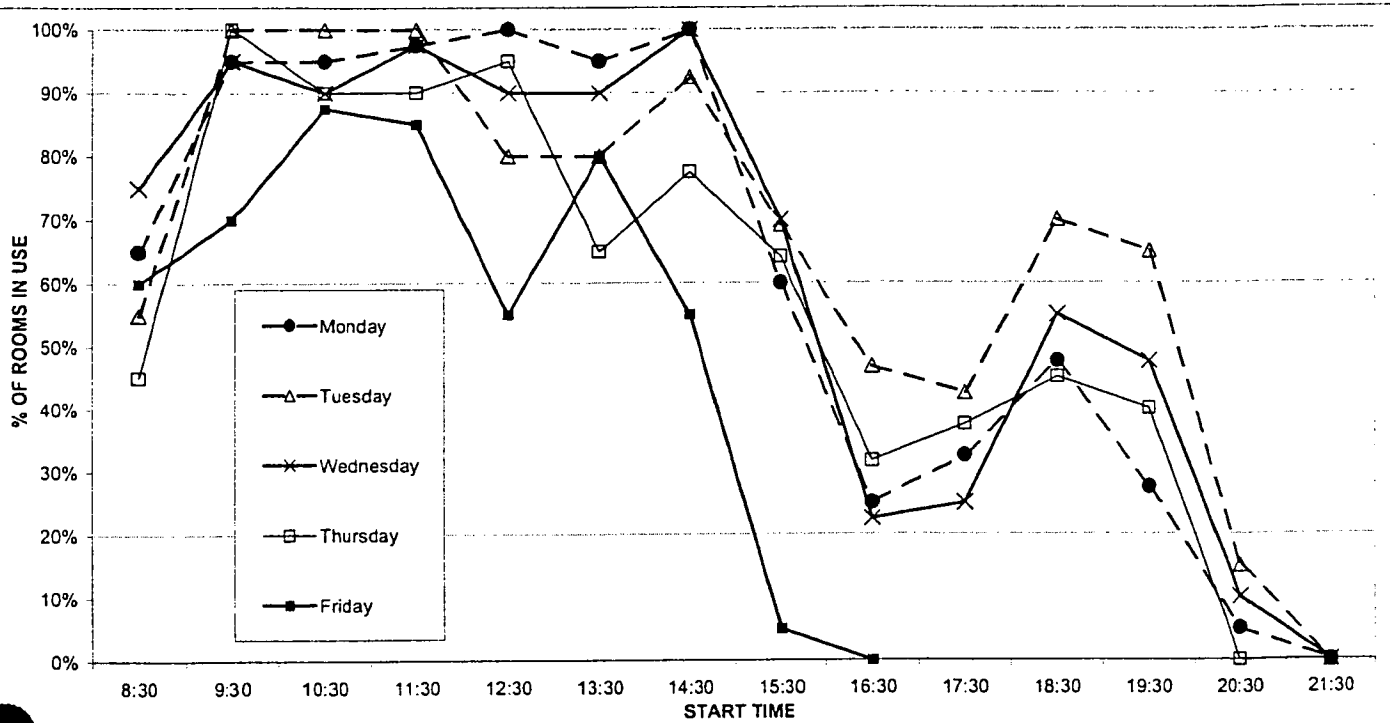


Classroom Utilization by Room Type, Day, and Time Slot
FALL 2002

Room Type: Lecture Theatre

CENTRALLY SCHEDULED

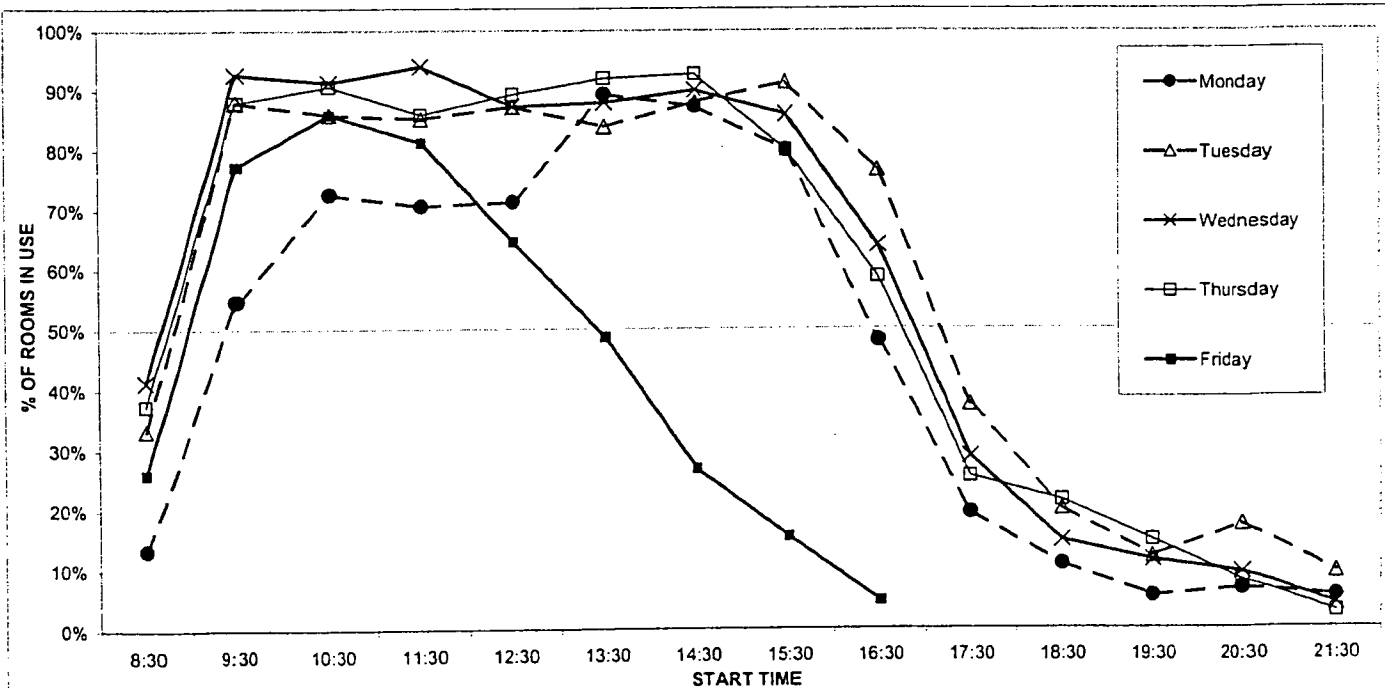
Utilization of the 12 Lecture Theatres Assigned to the Registrar's Office, As of Fall 2002



Room Type: Seminar

CENTRALLY SCHEDULED

Utilization of the 75 Seminar/Tutorial Classrooms Assigned to the Registrar's Office, As of Fall 2002



Fall 2002 Semester - High Capacity Rooms (Greater than 190 Seats)

Occupied rooms during daily time slots

Sum of Registered Students per Classroom

Rooms Key	Time Slot	Monday	Tuesday	Wednesday	Thursday	Friday
SFUAQ3181 Capacity: 229	0830	201		201		201
	0930	123	162	123	213	123
	1030	194	162	194	213	194
	1130	200	207	200	207	200
	1230	155	39	155	39	155
	1330	131	83	131	83	131
	1430	164	152	164	83	164
	1530	96	152	96	34	
	1630		39	96	34	
	1730	126	39	126		
	1830	126				
	1930					
SFUAQ3182 Capacity: 253	0830	147	151	147	117	147
	0930	169	151	169	117	169
	1030	110	255	110	255	110
	1130	250	255	250		250
	1230	124	165	124	219	124
	1330	177	165	177	219	177
	1430	118	148	118	168	118
	1530	118	148	118		
	1630					
	1730					
	1830					
	1930					
SFUB9200 Capacity: 335	0830	231		231		231
	0930	276	182	276	182	276
	1030	260	290	260	290	260
	1130	147	233	147	233	147
	1230	247	131	247	131	
	1330	300	168	300	131	
	1430	209	168	209	147	
	1530				147	
	1630					
	1730					
	1830					
	1930					
SFUB9201 Capacity: 333	0830	197		197		197
	0930	296	199	296	199	296
	1030	262	303	262	303	262
	1130	75	266	184	266	184
	1230	155	268	155	268	155
	1330					
	1430	156	299	156	299	156
	1530					
	1630					
	1730				145	
	1830				145	
	1930				145	
SFUC9001 Capacity: 504	0830	420		420		420
	0930	330	374	330	374	330
	1030	351	375	351	259	351
	1130	464	375	464	259	464
	1230	320	468	320	468	320
	1330	310	310	310		
	1430	332	152	196		
	1530	332	152	196		
	1630					
	1730					
	1830					
	1930					
SFUC9002 Capacity: 195	0830		147		80	
	0930	77	147	77	80	77
	1030	101	159	101	91	101
	1130	129	159	129	91	129
	1230	175		175	104	175
	1330	137	143	137		137
	1430	135	143	169	74	
	1530	135	52	169	74	
	1630	160	52			
	1730	160				
	1830	160	102			
	1930		102			
SFUIMATHEA Capacity: 482	0830	262		262	436	262
	0930	414	436	414	436	
	1030	414	434	93	434	93
	1130	243	179	243	179	243
	1230	121	293	121	148	201
	1330	197	293	121	148	201
	1430	197	74	145		
	1530	34	74	145		
	1630	34	171		171	
	1730					
	1830		146			
	1930		146			
SFUMPX7618 Capacity: 192	0830					110
	0930	173	90	173	90	110
	1030	28	90		90	184
	1130	28	116	75	116	184
	1230	68	47	87	47	
	1330	68	74	87	74	135
	1430	60	74	60	74	135
	1530	128	63	128		128
	1630		63			
	1730					
	1830	125	126	125	75	
	1930	125	126		75	
SFUWMX3520 Capacity: 254	0830	243	243	243	88	
	0930	52	168	52	88	
	1030	165	168	203		
	1130	165	98	203		
	1230	240	98	240	149	
	1330	72	238	91	149	139
	1430	72	238	91	193	139
	1530		238		193	
	1630					
	1730			139	167	
	1830		161	139	167	
	1930		161	139	167	

APPENDIX II

Discussion Paper: Course Access Limitations

This Discussion Paper details the systematic exploration by the Course Accessibility Task Force (CATF) of the factors that may affect a student's access to a course. For each identified limitation to access, the problem is explicated, possible remedies are considered, and Potential Recommendations are sketched. After much discussion and debate, this was winnowed down to the smaller set of recommendations and brief rationales found in the Final Report of the CATF. A number of the possible remedies and potential recommendations failed to survive. Some were seen as too speculative and others of only marginal relevance to accessibility. Some did not gain consensus support, and in other cases we lacked empirical evidence to validate the problem or to justify the solution. Nonetheless, this Discussion Paper is being included as an appendix to the final report since it may contain information or opinion of some value. The CATF worked within a short time frame that made it impossible to pursue all leads and check all possibilities. This working document is submitted to facilitate such efforts should any of its ideas be deemed worthy of further attention.

1. System-wide Limitations

1.1 *Available classrooms not large enough for needed capacity*

Problem

In the questionnaire survey of the severity of various limitations to course access, half the programs gave lack of large classrooms a rating of 5-7 on a 7-point scale, and 5 programs rated it 7 (most severe).

Possible Remedies

There are three ways to address this limitation to course access:

- a) create more mid-large classrooms;
- b) lessen demand by reducing the number of mid-large classes;
- c) more efficient scheduling of courses into mid-large classrooms.

Possible remedies are available in each regard.

More classrooms: The University is designing several new buildings for the Burnaby campus, and is planning to create or take over space at each of its other campuses. In formulating these plans, the administration should give a high priority to the Registrar's need for more classrooms, particularly large ones. Also important is protecting existing classroom space from conversion to alternative uses (generally research).

Fewer large classes: Pressure on the largest classrooms would be eased if a large course was split into two smaller classes or sections. That does double instructor costs (unless the class is split into halves that meet at the same time with students in one room receiving an audio-visual feed from the instructor in the other room). However, there is a compensating gain in smaller class size.

More efficient scheduling: The vector for most very large courses is 2 hours of lecture plus a 1-hour tutorial. The pressure on large classrooms would be reduced if the lecture time was cut to one hour per week. A replacement 1-hour activity could be scheduled in smaller rooms. This would incur increased instructional costs (extra TAs, for example), but only for a small number of courses. Since building more classrooms is essentially impossible in the short term and challenging in the long term, more efficient scheduling may be the most viable remedy to the shortage of mid-large lecture rooms.

A more ambitious remedy is the radical redesign of large courses. Acknowledging that lectures do not have to be live to be lively, this might involve taped lectures that can be replayed where and when convenient to small groups of students. TAs could moderate such sessions, stopping and replaying the tape as appropriate and responding to student questions. These small group meetings could be structured in way that facilitated student-to-student teaching.

There are other ways of organizing large classes without needing large classrooms. Under a unit mastery system, for example, students pace themselves and take automated exams on each chapter of the textbook as they feel ready. An instructor may provide a voluntary weekly lecture and TAs offer drop-in tutorial sessions. This arrangement may seem to have too few of what many consider essential course characteristics, but it may be worthwhile considering it for one or two experimental versions of a large introductory course.

Potential Recommendations

- 1.1.1 New building plans must give high priority to classroom space, particularly in the mid-large range.
- 1.1.2 Conversion of classroom space to other uses must be resisted, and efforts should made to create additional classrooms when current space assignments are changed.
- 1.1.3 Programs with courses needing large classrooms should consider changing the course vector to reduce demand on this space.

- 1.1.4 Incentives should be provided to encourage experimental offerings of radically redesigned large-enrollment courses not involving large lectures.

1.2 *Insufficient classrooms available at desired day and/or time*

Problem

This refocuses the problem from an insufficient supply of mid-large classrooms to a day/time preference pattern indicating avoidance of unpopular class times (e.g., 8:30 a.m.) and days (e.g., Fridays). It was rated by Departments as the 7th most severe limitation to course access.

Possible Remedies

Since it is implausible to consider reducing overall demand on space (that is, reducing the number of courses), the potential remedies are to increase overall supply (create more classrooms – see Recommendations 1.1.1 and 1.1.2), and to flatten the day/time preference pattern through more frequent scheduling of currently unpopular periods. Although there is likely to be a drop-off in enrollment as a course is moved to a less popular time, this will be less pronounced for required than elective courses. Incentives may be needed to ensure cooperation at the program level.

The final remedy for classroom unavailability is to create courses that do not use a classroom at all (this will be pursued below in Item 1.5 on distance education).

Potential Recommendations

- 2.1.1 Scheduling of classes must make greater use of currently unpopular times and days.

1.3 *Course not at desired location (Burnaby Mountain, HC, Surrey)*

Problem

As the number of SFU campuses increases, the limitations of inter-campus travel will affect course access for an initially small but growing number of students.

Possible Remedies

The need for inter-campus travel is largely avoided when a student's courses in a given semester are packaged into campus-specific bundles. However, since such "semester-study" programs are difficult to integrate

into the highly flexible scheduling currently enjoyed by almost all students, efforts should also be made to facilitate inter-campus travel.

Potential Recommendations

- 1.3.1 Program planning for the SFU-Surrey campus should include consideration of semester-study packages that allow students to take all courses in a given semester at one campus, thereby avoiding inter-campus travel.

1.4 Registration Priority Number (RPN) system affects access

Problem

The RPN system may not be maximally efficient, perhaps because it fails to give sufficient priority access to certain categories of students.

Possible Remedies

Fine-tune the RPN system to reduce any inequities. For example, the high priority granted to first semester direct-entry students is withdrawn for the second semester. Perhaps this elevated priority for new students should be reduced less abruptly.

Potential Recommendations

- 1.4.1 The criteria used in the RPN system should be reexamined and if necessary adjusted to improve the overall fairness and efficiency of the system.

1.5 Too little use of other delivery systems (e.g., distance, on-line)

Problem

There is an image problem with Distance Education (DE) courses. Eleven programs rank as their #1 reason for not giving more DE courses that it is "not seen as good as face to face". A key issue is whether this perception has a basis in reality. To the extent that it does, it will be difficult to promote its use. But to the extent that the perception is incorrect, the Centre for Distance Education should work to change it.

It is misleading to characterize this as a problem with distance education. A high proportion of DE students are in fact local students taking this type of course for reasons other than their distance from campus (e.g. campus section of course is full; convenience; conflicting work schedule). The

defining characteristic of this delivery mode is that it typically includes no group face-to-face (F2F) instruction, so it is here labeled "non-F2F".

Possible Remedies

Increased use of non-F2F courses is one remedy. Such courses avoid access limitations associated with classroom availability, and they may be less costly than F2F courses (although this is debatable). In addition to their obvious value in serving students at a distance, they also offer flexible additional capacity when F2F course sections are over-subscribed.

Potential Recommendations

1.5.1 Identify and where possible address the limitations stated by programs as obstacles to greater use of non-F2F courses.

1.5.2 Promote non-F2F course ownership by:

- increasing the supervisor's stipend;
- convincing programs that these are their courses;
- ensuring regular course updates and rewrites;
- introducing an effective program evaluation system.

1.5.3 Explore ways to motivate non-F2F course authorship.

1.6 *Registration allowed only one semester at time*

Problem

Although information about course offerings in the following two semesters is now available to students at the time of registration, it may not be very reliable. Some programs may be unwilling or unable to invest the effort to ensure predictive accuracy of scheduling. Even if the information is reliable, students may not pay much attention to it since they can register only for the coming semester. Nonetheless, other universities manage to allow registration for up to 3 semesters. There might be some gains in course accessibility if we provided multi-semester scheduling information and if we also allowed multi-semester registration.

Possible Remedies

The logical first step is to provide multi-semester scheduling information. Thus, although summer registration would be for the Fall only, students could be provided at that time with full scheduling information for the Fall and Spring (and possibly Summer) semesters. That should allow them to make better considered mid-range plans, even if they still had to register those plans one semester at a time.

If a sufficient level of predictive accuracy could be achieved in multi-semester scheduling, that would provide the experience and confidence needed to move toward partial or full multi-semester registration. A partial system might see students register in the summer for 3 semesters in advance, with "mini-registration" opportunities in the Fall and Spring for the following semesters. Mini-registration would allow students to implement changes in their own plans and to respond to course scheduling changes introduced by programs. If a sufficiently high proportion of the students' initial registration decisions went unchanged, there would be an incentive to move to a full system of multi-semester registration.

Potential Recommendations

- 1.6.1 Once the Registrar gains sufficient experience with AdAstra, the scheduling software program, Departments should be asked to provide sufficiently reliable information to allow multi-semester scheduling.
- 1.6.2 Students should be asked in the summer registration to state their course selection plans for the following year, both to aid in fine-tuning capacity distribution, and depending on the predictive accuracy of scheduling information, to pave the way for multi-semester registration.

1.7 Registration system allows irregular timetabling patterns

We have several regular scheduling practices: e.g., starting classes on the half-hour; science lectures run for one hour each Monday, Wednesday and Friday; 50-minute periods. The AdAstra software allows us to model variations from these practices. For any given set of courses and vectors, there are doubtless differences in scheduling efficiency according to the particular practices employed.

A serious impediment to implementing scheduling changes in the near future is the impending introduction of the new SIMS. The administration will doubtless wish to limit the changes in business practices at that time to those that are required by the move to the PeopleSoft system. It is likely that implementation of any recommendations we make will be deferred until we have cleared the SIMS hurdle.

1.8 Implementation of W- / Q- / B-course requirements

Problem

At best, the introduction of the Writing / Quantitative / Breadth course requirements will be neutral in terms of enrolment patterns. That is, enough courses will be given those designations that students will have to

make few if any changes to their "normal" course selections in order to satisfy the requirements. At worst, however, establishing these requirements (expected in 06-3) could create severe access bottlenecks. Whether it is a significant number of science students looking for breadth courses in the humanities, or a sizeable group of Arts students looking for breadth courses in Science, the changes could be quite disruptive if they are not anticipated and accommodated.

Possible Remedies

The proposed future Ad Hoc Steering Committee, recommended by the CATF, should consult with and advise the UCC Implementation Task Force with respect to potential access limitations created by the introduction of W- / Q- / B-course requirements.

2. Faculty-level Limitations

2.1 *Inadequate number of base-budgeted continuing instructors*

Problem

Continuing faculty (CFL tenure-track, lecturers and Lab Instructors) provide only 2/3 of all course instruction across the University, with the balance accounted for by short-term appointees (mostly sessional instructors and some limited term faculty). Although many SIs are excellent teachers, they cannot – as a group – match continuing faculty in respect to such pedagogically important attributes as active research involvement, experience, continuity, and, for graduating students, the capacity to provide references.

Possible Remedies

The single best way to improve course access is to provide more instructors, and the best type of instructor is a continuing faculty member. This is also the most expensive remedy, but there are encouraging recent signs that the administration can and will commit funds for net new CFL appointments. In some cases, this is closely tied to increased demand (student FTEs), as with Access and Doubling the Opportunity funding and one component of revenues from international student tuition fees. The commitment in the 03/04 budget to reducing the FTE/CFL ratio, and the application of a significant portion of international student tuition fees to improving access, should make a substantial difference. These focused actions to address course access limitations should have lasting effects.

Potential Recommendations

- 2.1.1 The University should maintain its commitment to reducing the student:faculty ratio and supplying the base-budgeted resources needed to improve course access.

2.2 *Insufficient budget for short-term instructors*

Problem

In one sense we have too many SIs, as argued in the previous section. In another sense, judging by departmental responses on the questionnaire, we have too few. Thus, lack of SI funding was rated by programs as the second most severe limitation on course access.

Possible Remedies

Of course, everyone would prefer to fill teaching needs with continuing faculty than with short-term instructors. However, even if we improve our continuing instructor course coverage from 2/3 to 3/4 or better, we will still need SIs. The good news is that as the number of CFL positions increases, so will the CFL salary fall-out that is the principal source of SI funding.

Programs lose instructional capacity every time a faculty member is on leave or is provided with a teaching release in return for administrative contributions. It may be overly optimistic to expect that Faculties will be able to fund full teaching replacement with short-term appointments, but they can be expected to improve on current replacement rates.

Potential Recommendations

- 2.2.1. Faculties should supply their programs with sufficient resources to cover an increased proportion of "lost" instruction, preferably by continuing faculty and if not by short-term teaching appointments.

2.3 *Insufficient budget for teaching assistants*

Problem

Course-full-turnaway figures show that our most acute access problems are in lower division lecture/tutorial courses. TA allocations to programs are such a powerful constraint on course capacity that this was identified in questionnaire responses as the most severe limitation to course access.

Possible Remedies

At one level, the remedy is simple – increase funding for TAs. However, it should be noted that such a move, other things equal, will tend to increase the FTE/CFL ratio, which is contrary to the Administration's goal. That does not mean that TA funding should not increase, but it highlights the importance of assessing the access improvement recommendations in this report collectively rather than in isolation. A second concern is the availability of TAs. In some programs this is already a major issue, with 1/3rd or more of their TAs being external.

Potential Recommendations

- 2.3.1 The Administration should increase TA funding so that more tutorials can be opened in those courses experiencing the highest levels of course-full-turnaway.

3. Program Limitations

3.1 *Hard to attract qualified short-term instructors*

Problem

This limitation was rated as the 4th most severe on the departmental survey. It is unlikely that this simply reflects a diminished supply of qualified individuals. More plausibly, the levels of remuneration for sessional instructors are becoming increasingly non-competitive.

Possible Remedies

One readily available but not always considered source of supply is PhD students near the end of their program. Some programs regularly employ these students as SIs, while others do not. In conjunction with the Learning and Instructional Development Centre, the Dean of Graduate Studies has developed a Certificate Program in University Teaching and Learning. This will provide instructional training for PhD students contemplating a career that includes teaching. There is always a concern with graduate students that an increased involvement in teaching might unduly slow their research progress. But if it is successful, the Certificate Program will increase the supply of well-qualified short-term instructors and will make appointment of these students as SIs a more attractive prospect both to PhD students and to Departments.

Increasing the levels of remuneration for SIs is a challenge. Even if achieved, the financial climate is such that improvements in pay would be modest at best, and it is debatable whether such small changes would

have any appreciable effect on the attractiveness of the job to potential SIs. A more effective strategy may be to package the short-term instructional positions in ways that make them more desirable. For example, more use could be made of limited term lectureships, particularly in larger Departments that have more courses that need covering and are have greater flexibility in creating course packages. A full-load lecturer has a nominal teaching load twice that of a tenure-track faculty member, or 5-8 courses depending on the Faculty (actual loads are generally somewhat lower than nominal loads). However, it is possible to create a partial-load lectureship where, for example, a Department has 4 courses needing coverage over two semesters that lie within a single person's range of teaching competence. The per-course cost of such appointments is a little more than the sessional rate, but the instructional package may be significantly more attractive than if the program attempts to cover the courses with four different SIs.

Potential Recommendations

- 3.1.1 The Dean of Graduate Studies is encouraged to promote the recently established Certificate Program in University Teaching and Learning for PhD students.
- 3.1.2 Faculties and Programs should more actively consider bundling individual sessional instructor positions to allow for full-load and partial-load limited term lecturer appointments.

3.2 *Not enough qualified teaching assistants*

Problem

Although some programs have many qualified graduate students applying for each TA position, a few Departments must rely on a sizeable number of external applicants to fill all of their TA positions. This challenge is made more difficult as more graduate students win scholarships and fellowships or secure employment as RAs, all laudable achievements.

Possible Remedies

Departments that have more TAs than graduate student applicants need to tap other populations. Four pools of potential TA candidates are:

- honours undergraduates
- graduates taking a year off before entering graduate school
- graduates in cognate Departments
- qualified individuals in the broader community.

Potential Recommendations

[None]

3.3 Program curriculum requirements are too complex

3.4 Course prerequisite structure too restrictive

Problem

The more complex the requirements for a credential, the more problems students seeking this credential will have accessing the courses they need when they need them. Individual program regulations must vary in the degree to which they are warranted on pedagogic or scholarly grounds. Whereas some are clearly essential, others may simply be desirable, and it is likely that a small number of program requirements can be justified only as weak preferences. For example, when a new course is proposed one consideration is whether it should have prerequisites. In answering that question, little if any weight may have been given to the downside argument that prerequisites limit course access. It is noteworthy when Departments appreciate that unnecessary regulations present a problem for their students and take appropriate action. This happened recently in the Department of Political Science, when it changed most of the varied and complex prerequisites for its upper division courses to a simple two-category set (6/8 lower division credits or permission of the Department for 300/400-level courses).

Possible Remedies

Programs should be encouraged to review the regulations for their credentials, and consider whether they could be simplified in order to improve student access to courses. No-one would expect any lowering of academic standards, but some regulations with only weak or outdated justification might be identified and eliminated.

Potential Recommendations

3.4.1 All programs should review the regulations for their undergraduate credentials and eliminate those with weak or outdated justification.

3.5 Too many course contact hours given the number of course credits

Problem

For most courses, contact hours and credit hours match. But in a few cases the scheduled classroom and laboratory hours exceed the number

of credits for the course. The justification for the excess hours may be too weak to warrant the additional scheduling and instructional costs.

Possible Remedies

Where appropriate, reduce contact hours to - but not below – credit hours.

Potential Recommendations

- 3.5.1 When the classroom/laboratory hours for a course exceed the credit hours, the program should consider whether the extra scheduling and instructional costs are warranted.

3.6 *Discipline coverage fragmented into too many courses*

Problem

The issue here is how thinly a disciplinary domain should be sliced? If a Department requires its majors to take a minimum of 40 credits, say, in the discipline, what is the optimum number of courses credits it should have on offer? There can be no simple answer to this question, since it must depend on such factors as the depth and breadth of the discipline as well as on the Department's capacity to offer each of its courses at least once every six semesters. Departmental practice varies widely in this regard. One program has on offer in the calendar 10 times the minimum number of required credits; another program has fewer than 5 times the minimum. One factor that contributes to course proliferation is the so-called "ratchet effect." This describes the splitting of courses as professors seek to cover their areas of expertise in more depth, a process that rarely seems to be reversed.

Possible Remedies

An indicator that a Department may have too many course credits on offer is regular difficulty in scheduling all of its courses with at least the minimum frequency (the Registrar annually lists all courses that have not been scheduled in the previous six semesters, and SCUS asks Departments to drop these courses or justify maintaining them). Departments whose courses appear frequently on this list should be asked to consider aggregating some of their courses or in some other way reducing the number of credits it has on offer.

Potential Recommendations

3.6.1 Departments having difficulty scheduling all of their courses with adequate frequency should consider aggregating courses or in some other way reducing the total number of course credits on offer in the calendar.

3.7 *Some courses offered too infrequently*

[See comments in 3.6 above.]

3.8 *Insufficient advance notice of semesterly course schedule*

[See comments in 1.6 above]

3.9 *Program's course offerings does not match student demand*

Problem

Many Departments experience a total enrolment demand that exceeds their instructional supply. The obvious remedy for this problem is to increase the Department's instructional resources. There is a different aspect of this general problem that needs addressing, and that is the mismatch between the supply/demand patterns. When a Department opens 100 seats in each of two courses, but receives 150 enrolment attempts for 1 course and 50 for the other, it has sufficient capacity but is allocating it in a way that does not match the pattern of student demand.

Possible Remedies

If the pattern of student demand can be predicted (and that is a big "if"), Departments could try harder to ensure that their allocation of capacity matches the predicted pattern as closely as possible. Even if this simply stated goal is accepted, however, the obstacles to achieving it are formidable in most Departments. They include many of the items in this access limitation list, but the most severe problems are likely to be associated with faculty teaching preferences, course enrolment caps, classroom unavailability, and academic paternalism.

Potential Recommendations

3.9.1 When scheduling courses and distributing instructional capacity across those courses, Departments should review the history of demand for its courses, and should strive to match its course selection and capacity allocation to the predicted pattern of student demand.

3.10 *Enrolment caps limit capacity in high demand courses*

Problem

Some enrolment caps are physically based (e.g., on classroom capacity, or on fire marshal regulations). Others caps are pedagogically based, perhaps on the argument that the quality of instruction would drop to an unacceptably low level if the class size was any greater, or that no more students could be accommodated without changing the assessment system (from essay to multiple choice exams, for example). Finally, all programs in which aggregate course demand is greater than total instructional capacity must engage in what amounts to course capping.

Possible Remedies

Almost all Departments are faced with decisions on whether and how to cap course enrolments (the maximum size of a seminar course is probably the most common). They come to different conclusions, with some programs showing a much greater willingness than others to absorb demand by increasing course size (the student/faculty ratio varies across programs from less than 10:1 to nearly 50:1). Undoubtedly access problems would diminish if Departments could be persuaded to raise or eliminate enrolment caps. However, there is no way to avoid construing such a move as a pedagogic threat. It may be a minor threat (when, for example, allowing 20 more students into a lecture course of 100 students), but it is unlikely to be seen as negligible.

Departments that have responded to demand pressures by allowing course size to increase are particularly concerned that they will suffer double jeopardy if access remedies are based on the course-full-turnaway (CFT) index. CFT is an imperfect but useful measure of demand/supply imbalance, but it would be unfair to base remedies solely on variation of this index since some of that variation reflects differential willingness to accept large classes. The most willing Departments will tend to have higher student/faculty ratios, so a fair application of remedies must take both the CFT and student/faculty indexes into account.

Potential Recommendations

- 3.10.1 When allocating additional resources to alleviate enrolment pressures, the administration and departmentalized Faculties should consider statistics on both course-full-turnaways and student/faculty ratios.

3.11 *Program has too many course seats reserved for its own students*

Problem

Students need to find room in courses in their own program as well as in courses in other programs. When capacity is limited, Departments are challenged to accommodate both demands in a fair manner. A program's primary interest in meeting the needs of its majors and honours may lead it to reserve a significant proportion of its course places for its own students. However, all Departments share a common responsibility to provide access to majors and honours from other Departments. This is a greater problem at the upper than lower division, and it is likely to be exacerbated when the new breadth regulations are implemented.

Possible Remedies

In general, Departments should allow reasonable upper division course access to students from other programs. In particular, Departments should consider mounting one or more 300-level courses with few if any prerequisites that would be open to non-majors only. The absence of prerequisites would put such courses within reach of most students, while the content and presentation would be appropriate for the upper division.

Potential Recommendations

- 3.11.1 When reserving course spaces for their own students, Departments should allow reasonable access for students from other programs.
- 3.11.2 Departments are encouraged to mount upper division courses for non-majors that have few if any prerequisites.

3.12 *Upper division students from other programs have too little access*

[See comments in 3.11 above.]

3.13 *Late cancellation of whole course or of tutorial/lab section*

[This is a system error that should be avoided.]

3.14 *Poor coordination of course scheduling across programs*

Problem

When one set of program requirements mesh with that of another program, it makes eminent sense for the two programs to consult closely

when scheduling courses. This is done to some extent, but it may not be done as frequently and as fully as it should be.

Possible Remedies

It is possible that the new AdAstra scheduling system will make it easier for such consultation to occur.

Potential Recommendations

- 3.14.1 Programs with interlocking or interacting program requirements should consult when scheduling so as to avoid course overlap.

3.15 *Insufficient use of summer semester*

Problem

Over the last 5 years, the proportion of FTE enrolments that fall in the Summer semester has held steady at about 20% (the remaining 80% is fairly evenly split between the Fall and Spring semesters). The underutilization of facilities in the Summer suggests an obvious remedy for the course access problems that surface mainly in the other semesters. When asked why they did not schedule more summer courses, Departments identified one major obstacle – unavailability of continuing instructors. Although chairs have the responsibility of assigning teaching loads, which includes specifying the semesters in which colleagues teach, in reality faculty members can usually beg off summer teaching if they wish to, and most do.

Possible Remedies

Chairs regularly use a range of “sticks and carrots” in establishing their course schedules. However, casual feedback suggests that increasing course capacity in the summer has not been high on their priority lists. A number of chairs have suggested that the importance of making best use of scarce instructional resources is a deterrent to scheduling courses in the summer when enrolments are lower. The counter is that this becomes a self-fulfilling prophecy if lower summer enrolments are the result of reduced course capacity. It is notable that summer semester usage varies widely across programs.

Potential Recommendations

- 3.15.1 Departments are encouraged to increase summer semester course offerings, thus reducing demand on facilities in the Fall and Spring.

4. Instructor Limitations

4.1 *Continuing instructor prefers to teach small classes in own area*

Problem

It is not cynical to suggest that the typical faculty member prefers smaller courses to larger courses, graduate to undergraduate courses, and upper to lower division courses. This is not based on workload considerations, but rather on intellectual stimulation, and on the relationship of the teaching to the faculty member's own research. These preferences make it challenging for Chairs to ensure proper coverage, particularly for larger, lower division courses. To the extent that this core teaching is seen as chore teaching and is left primarily to non-continuing faculty members, we are not serving our students' best interests.

Possible Remedies

It might be possible to establish a general expectation (if not a regulation) that every faculty member contributed his/her fair share to the teaching at all levels of the curriculum. However, such general expectations that are unevenly applied lack force. Moreover, the equal shares principle ignores the fact that some faculty members are better suited than others for teaching at a particular level. As with persuading faculty to teach in the summer semester occasionally, it may be best left to Chairs to ensure reasonable contributions from continuing faculty at all levels of the curriculum. In the long term, the problem would be eased if new faculty members had appropriate expectations in this regard. If discussions of teaching plans with new faculty members led them to expect to teach a lower division course on a regular if infrequent basis, that outcome would be more easily achieved.

Potential Recommendations

- 4.1.1 Chairs should inculcate the expectation among continuing faculty members (especially at the time of appointment) that they share the responsibility for teaching lower division courses.

4.2 *Continuing instructor prefers to teach graduate courses*

[See comments in 4.1 above.]

4.3 *Continuing instructors limit availability to certain times/days*

Problem

Although Departments claim that faculty semester preferences are a significant deterrent to summer teaching, they give faculty time/day preferences a low rating as a course accessibility limitation. Perhaps it is a myth that many faculty members will not teach on Mondays/Fridays, or before 10 or after 4. If that is a myth, then it should not be difficult to persuade continuing faculty members to extend their teaching availability over the full range of times and days.

Possible Remedies

As with scheduling more courses in the summer, an argument for avoiding unpopular times/days is that enrolments will suffer. Certainly, if the choice is between mounting a course when it will attract an enrolment of 100 versus only 50, the answer is obvious. But that is not the choice when the popular slots are all filled. Then the issue is whether to put on the course at an unpopular time if not at all. Framed that way, the best decision will often be to offer the course even at the unpopular time even if enrolment is modest.

Potential Recommendations

[See Recommendation 5.2.1 below.]

4.4 *Course releases reduce availability of continuing instructors*

Problem

Whenever a faculty member is approached to take on an administrative task seen as onerous – chairing a committee, for example – they ask for a teaching reduction. Greater than usual research involvement is also now heard more often as an argument for reduced teaching. Each time such a reduction is granted, the teaching program suffers; access is reduced or a continuing instructor is replaced by a short-term one. Moreover, it buttresses the growing impression that teaching is a chore rather than one of the two core activities in which faculty members are expected to engage.

Possible Remedies

It may be too difficult to wind back the clock and withhold teaching reductions where previously they were granted. However, Deans should be vigilant in ensuring that approval of such reductions is reasonable and fair.

Potential Recommendations

- 4.4.1 Deans should ensure that teaching reductions are fairly distributed and are approved only when warranted by excessive demands in other areas.

5. Student Limitations

5.1 *Students insufficiently flexible in choosing electives*

Problem

The greater the number of possible course combinations from which students must choose when registering, the harder it is to satisfy them – to give them access to their first choice set of courses. When the number of combinations becomes very large, it is difficult to predict demand with the specificity and accuracy needed for optimal course scheduling and capacity allocation. However, it may well be the case that the student would be well satisfied with not just their first choice but also course sets representing Choice #2, #3, #4, and so on. What students likely care about most is that they get into any required courses and that they get into their desired number of courses. Problems with either become more than mere inconveniences if they slow down a student's progress and increase their time to program completion by a semester or more.

Possible Remedies

Current registration procedures do not make it easy for a student to determine which of their top course sets are available. The new SIMS, however, identifies capacity in real time, allowing students to quickly separate accessible from non-accessible course sets.

It is probably not feasible to countenance broadening student decisions about what is acceptable as a replacement elective when they encounter a full course. It makes more sense to invest efforts into reducing the likelihood that the courses they check first will be full. That said, there is one way in which their course set preference could be shaped, particularly for new direct entry students. That is to give preferential access to pre-identified sets of courses.

It might be attractive to students if several exemplary course sets were identified at registration time. They would be chosen to be of the right size (12 or 15 credits, say), to have a coordinated lecture schedule within each set, and to provide enhanced likelihood of access (through extra capacity, and perhaps a bonus added to the RPN of a student who chooses such a package). The component courses would change each semester so that

no Department was systematically favoured over the long run. The reasons for thinking that these pre-packaged course sets might be attractive are those listed above.

Potential Recommendations

- 5.1.1 The administration should monitor the proportion of students who fail to register in the number of courses they were seeking, and determine whether improvements designed to enhance access improve this key accessibility measure.
- 5.1.2 Consideration should be given to an experimental offering of pre-identified course packages that would be attractive options for students who wanted to simplify the registration process.

5.2 *Students' availability limited to certain times/days*

Problem

Just as popular wisdom lays some of the blame for the avoidance of courses scheduled for unpopular times/days at the feet of faculty members, so also are students given some of the blame.

Possible Remedies

It is reasonable to expect that if students can get the courses they want but only at a less popular time, a significant number will choose to do so rather than not taking the course at all. Students will not take courses at unpopular times, so few courses are scheduled then. But because few courses are scheduled then, enrolments at those days/times are modest. The way to break the bind is to add more courses at unpopular days/times (and in the evening and summer semester) without shifting courses away from the scheduling mainstream. By using added resources rather than moving existing ones, Departments would be less likely to feel that their enrolments are being jeopardized. And gradually, students and instructors would get used to this extension of scheduling parameters and what was once unpopular would become less so.

Potential Recommendations

- 5.2.1 Extra instructional resources should be provided to Departments to induce them to put on additional courses in less popular parts of the schedule (e.g., 8:30 – 9:30, evening, Friday, summer semester).

5.3 *Course duplication reduces access to first-time enrollees*

[This is a minor problem that will become even less important as the steps taken to improve course accessibility take effect.]