DALHOUSIE UNIVERSITY	Policy Sponsor: Provost	Approval Date: Senate: April 11, 2016 Board of Governors: June 22, 2016
Academic Schedule Policy	Responsible Unit: Faculties and Registrar's Office	Revisions:

A. Background & Purpose

Academic scheduling is a keystone activity of the university. The academic schedule affects a student's experience at the university, both in terms of the availability and selection of courses and the ability to tailor a schedule that complements their non-academic constraints and desires. The schedule impacts the pedagogy in courses in terms of the availability of resources and also impacts Instructors. Among all these factors, the academic schedule must serve and support teaching and learning activities at the university.

The academic schedule requires coordination between Academic Units at the university and partner institutions such as the University of King's College.

Creating the academic schedule is a complex task that involves many stakeholders, including the students, course Instructors, Academic Units, and facilities management. The university will meet this complexity by adopting a process in which academic scheduling relies on Academic Units to define the course offerings needed in each academic term and relies on the Registrar to provide room and time assignments. The anticipated benefits of applying the policy are:

- maintaining or increasing student choice among courses while decreasing the coordination efforts currently performed by individual Academic Units;
- applying constraints consistently for all Instructors across the university;
- using a scheduling framework that will allow greater expansion in the course schedule for the future; and
- tracking of core requirements of the schedule on students, Instructors, and university facilities.

Past practice at the university has been that an academic schedule is created based on course and Instructor assignments and without student schedule demand.

Moving forward, student demand will be captured through course combinations and will form a basis of the academic schedule.

The purpose of this document is to define and assign the roles and responsibilities involved in creating the academic schedule for courses that are part of academic programs at the university, to define the parameters under which the Registrar assigns class times and locations, and to define procedures to resolve issues that can arise as part of creating the academic schedule.

Policies related to this Academic Scheduling Policy are

- Campus Booking Policy, which establishes the parameters and resolution mechanisms in the case of room or time conflicts with bookings outside the scope of this policy,
- Employee Accommodation Policy, which sets out procedures for employees seeking workplace accommodation, and
- Official Examination Regulations, which govern examination scheduling and which is outside the scope of the Academic Scheduling Policy, and
- Academic Term Dates Principles, which outline criteria for scheduling class days in academic terms.

B. Application

This policy applies to the creation of the academic schedule. It defines the university-level processes for academic scheduling and resolving scheduling issues for courses that are part of academic programs at the university including

- Credit courses, including lectures, labs, tutorials, studio sessions; and
- Non-credit courses needed to complete a technical, undergraduate, or graduate program.

The University Senate will review this policy no later than the fourth year following the policy's approval by the University Senate.

C. <u>Definitions</u>

Academic Unit: A unit at the university, whether an academic department, Faculty, school, college, or otherwise, that offers a course as part of a noncredit, technical, undergraduate, or graduate program at the university.

Academic Scheduling Constraints: Reasons deemed acceptable to justify:

- why a delivery cannot take place at a certain time or in a certain location.
- why a delivery must be in a specific room
- when a particular or group of Instructors are not available to teach

Classroom Common Pool: A classroom, seminar room, or auditorium that is equally available to all departments to book and is centrally administered.

Classroom Locally Managed: A classroom, seminar room, or auditorium that is under the control and responsibility of an individual Academic Unit.

Course Requirements: Information about an academic delivery or event that describes how the activity should be scheduled in terms of:

- Projected course enrolment
- Features of a room required to teach the course appropriately, including the type of seating, IT equipment etc.
- Format of delivery, including the number and length of periods, sequencing of delivery of theory and practice, the interval of time between periods, etc.
- Time-of-day or days of the week when the course cannot be scheduled, based on approved constraints.

Instructor: An individual appointed by the university who has primary responsibility for a course.

Mandatory adjustment: An adjustment that the university has a legal obligation to meet.

Mandatory scheduling constraint: A scheduling constraint for which the academic unit can assert that the constraint must be met, such as an Academic Unit indicating that a particular Instructor, who is a member of the University Senate, may not teach at the same time as the University Senate meets.

Room characteristic: A property of each room that describes special features, attributes, or equipment in a room that can affect or influence the mode of teaching in the room such as a stage, scientific laboratory equipment, audio/video equipment, or computer software.

Support Activities: An activity that is a planned and approved part of a course or an academic program and that complements lectures. Examples include labs, practicums, studio sessions, and tutorials.

Schedule: The listing of dates, times and locations of academic deliveries.

D. Policy Statement

The creation of the academic schedule shall remain a cooperative endeavor between the Registrar, the Academic Units, and other related units at the university. The roles and responsibilities of each of these participants are presented in Section E. The Registrar shall work with designates of the Academic Units and not directly with Instructors in establishing the academic schedule.

The academic schedule shall, as is reasonably possible, take into account scheduling constraints that are provided and approved by the appropriate Academic Unit prior to the generation of a schedule.

The following principles govern the creation of the academic schedule. The principles are grouped and ordered only for the sake of convenience.

Scheduling practices

- Courses identified as core elements for a common year of a program should be scheduled in a way that a conflict-free schedule with these core courses is feasible.
- As best as can be managed within the scheduling constraints, courses should be assigned to rooms with the required room characteristics for teaching the course.

Students

- The schedule should facilitate the widest range of program and course selection for students. To this end
 - The university will have a defined time pattern for courses (defined in Section F.1). Courses will follow the defined time pattern.
 - The schedule shall aim to provide the most combinations of courses across a day rather than have any single timeslot of the day with maximum selection of courses.
- Iterative schedule changes, following publication of the academic schedule, should be limited to allow Instructors and students to plan with greater certainty. Once registration exists in a course it cannot be removed from the schedule without the approval of the Provost.
- As it is possible to predict through course combinations, the time to transition between classes on the same campus or between campuses shall be considered when assigning course times and locations.

Instructors

- The assignment of times must not conflict with Instructors' other teaching assignments or academic responsibilities.
- The assignment of class times and locations for Instructors shall conform to the terms of the applicable collective agreements.
- All mandatory adjustments and mandatory scheduling constraints as approved by the appropriate Academic Unit (see Sections E and F) shall be respected.
- Adjustments and scheduling constraints that are not classified as mandatory, including Instructor scheduling preferences, will be considered in the assignment of times and locations in a best effort manner. Section F.9 of this policy provides a hierarchy that demonstrates an order of precedence among these adjustments and scheduling constraints.
- The time to transition between classes on the same campus or between campuses shall be considered when assigning course times and locations for Instructors.

• Courses should be taught in a time sequence that suits the pedagogy of the course and the established time pattern.

Academic Units

- Instructional space should be assigned based on the best match of available space, course size, and teaching space and time requirements.
- The scheduling process will consider, within the hierarchy of requests of Section F, requests from Academic Units to keep identified non-core course combinations as conflict-free as possible.

Facilities Management

• Secondary to the requirements of students, Instructors, and Academic Units, the schedule should optimize space utilization.

E. Administrative Structure:

The responsibility for creating and managing the academic schedule and its process lies with the university Provost. The elements of building the schedule shall be delegated as follows:

The Dean is responsible for the elements of the schedule for courses delivered by their Faculty. This responsibility covers: the identification of appropriate courses that support the Faculty's academic programs, pedagogic constraints relevant to offering elements of their academic programs, constraints that affect non-teaching aspects of an Instructor's workload, and the assignment of course Instructors. The Dean may delegate responsibilities to Academic Units, Chairs/Heads/Directors and other members of the Faculty as deemed appropriate. The responsibilities of the Dean include

- determining which courses are to be offered in which academic term;
- determining the number of sections of each course in each term and the sizes of each section, subject to consistency with past course registration and with trends in program enrolment;
- determining course combinations that must be conflict-free for the delivery of academic programs and course combinations for which a conflict-free schedule would be pedagogically advantageous to students;
- identifying room characteristics that are necessary for the offering of a course or course section;
- assigning Instructors to sections of each course;
- identifying scheduling constraints for Instructors. These constraints originate
 from duties and job requirements of Instructors that are under the purview of
 the Dean or originate from the university Employee Accommodation Policy;
- ensuring that Instructor preferences pertaining to scheduling dates, times, room characteristics, and locations are collected and communicated to the Registrar;
 and
- ensuring that course preferences pertaining to
 - o course time, location, and room characteristics scheduling parameters;
 - o core courses in programs that must remain conflict-free; and

o non-core course combinations that would be advantageous for students to keep conflict free

are collected from all Academic Units that report to the Dean and are communicated to the Registrar

The role of Human Resources is to manage the elements of scheduling constraints that pertain to the state of individual Instructors that are based on legal, health, human right, or other individually-based accommodation or obligation. Examples include

- medical conditions that restrict the location, duration, or frequency of instruction;
- religious holidays; and
- access to specific equipment in instruction to accommodate an Instructor's abilities.

The responsibilities in managing and approving accommodations for university employees are covered in the <u>Employee Accommodation Policy</u>. All constraints approved in accordance with that policy shall be considered as mandatory adjustments. The responsibility added by this policy is that Human Resources shall:

- communicate all mandatory adjustments to the Registrar prior to the creation of the schedule; and
- state the duration that any mandatory adjustments shall be effective, providing an end date, a renewal date, or indicate it as an ongoing mandatory adjustment.

The responsibilities of the Registrar include:

- assignment of times and locations to course offering sections while taking into account adjustment requests and scheduling constraints.
- the release of a preliminary schedule, at least one month prior to publication, for consultation and review.

Once the schedule has been finalized and published to students and prior to student registration, requests to change the schedule follow the priorities and appeals processes of Section F.9.

This policy provides three mechanisms to keep the schedule constraints in check:

- 1. the expectation that all individuals involved in scheduling respect the principles defined in the policy
- 2. regular reports on requests and on characteristics of the schedule to the University Senate in aggregate and to the Dean's Council in detail (Section F.10)
- 3. a conflict resolution process (Section F.9)

F. **Procedures:**

F.1 Schedule Time Parameters

The normal hours of operation for the academic schedule shall be from 8:30am to 10pm on Monday through Friday.

When the academic schedule assigns times to sections taught by the same Instructor or in a mandatory course combination, the schedule shall include a minimum transit time between locations as follows:

- 10 minutes when the two locations are on the same campus (Agricultural Carleton, Sexton, and Studley)
- 2 hours between Agricultural and any Halifax campus
- 30 minutes between Carleton and Sexton
- 30 minutes between Carleton and Studley
- 30 minutes between Sexton and Studley

Should additional campuses and locations, whether permanent or temporary, be used in the schedule, the Registrar shall establish appropriate transit times for the new location.

Courses will be assigned times according to the established university time pattern (See appendix A). The time pattern should take into consideration student choice by limiting overlapping time blocks. The time pattern should also take onto consideration Instructor and Academic Unit preference by offering several options for course delivery (e.g. three 50 minute classes per week, two 80 minute classes per week).

Changes to the university time pattern shall involve consultation with all Academic Units and Deans and shall require approval by the University Senate.

F.2 Deadlines

Each year, the Registrar shall publicize a date to the Deans and to the wider university community by which all scheduling information must be provided for inclusion in the next academic schedule generation. There shall be a minimum of 2 months between the due date of the scheduling information and the date of publication of the due date. The Registrar shall consider scheduling information received after this due date on a reasonable effort basis. The Registrar shall also publicize a date to the Deans and the wider university community on when a preliminary academic schedule shall be available to Academic Units for review and a date when the academic schedule shall be made public to students. There shall be a minimum of 2 months between the release of the first preliminary schedule and the date of public release of the schedule.

F.3 Course combinations

Since the academic schedule is created without pre-registration of students, course combinations provide a mechanism by which the scheduling process can account for sets of courses that students typically take in the same term. Students are best served if these course combinations are scheduled conflict-free.

There are two types of course combinations:

- course combinations that must remain free of scheduling conflicts among themselves, such as the core courses for a particular year of a particular program; and
- course combinations that are common selections of students in particular years
 of particular programs that, if possible, would be desirable to be free of
 scheduling conflicts among themselves, such as common or recommended
 elective selections.

Each Dean shall inform the Registrar of the course combinations and the anticipated number of seats required in each combination for all academic programs that report to the Dean by the due date of Section F.2 and shall identify which combinations are mandatory for students and which are conveniences for students. In recognition that the course combinations can over-constrain the schedule, the Deans shall ensure that

- the course combinations contain the fewest number of courses possible;
- the number of course combinations remains small:
- the course combinations are rooted in pedagogy and benefit to the students; and
- the course combinations intended as convenience for students are only defined for reasonable student population sizes.

The Registrar shall make every effort to ensure that mandatory course combinations remain free of conflict with one another. In the case where the course combinations involve courses with multiple sections, the schedule shall ensure that at least one combination of the courses is free of scheduling conflicts for the number of seats identified by the Academic Unit.

Following the generation of an academic schedule, the Registrar shall report back to each Dean the success rate of conflict-free scheduling for each course combination.

F.4 Section sizes

Each Dean shall report by the due date of Section F.2 a desired section size for each section to be scheduled. Desired section sizes should not exceed the prior year's enrolment in those course sections by more than 20% or 10 students (whichever is larger) without suitable explanation (example in Appendix C). If a section size exceeds that limit, the Registrar may request an explanation for the size increase from the Academic Unit offering the course section before scheduling the section. Reasonable increases will be accommodated in the academic schedule.

F.5 Building and room characteristics

Some course sections may require specialized equipment or room configurations for effective teaching. Each Dean shall report by the due date of Section F.2 any specific room characteristics needed for course sections. The room characteristic requests shall be for elements of the courses that are pedagogically mandatory for any offering of the class. Room characteristic requests to accommodate Instructor teaching style preferences are handled by Instructor constraints in Section F.7.

The Registrar shall make reasonable effort to accommodate the room characteristic requests, subject to the priority hierarchy of requests in Section F.9.1. Following the

generation of an academic schedule, the Registrar shall report any section whose room characteristic could not be met to the appropriate Dean.

The Dean may request a building and campus preference for each course section. Where possible these requests will be taken into account in the assignment of locations subject to the hierarchy of requests in Section F.9.1.

F.6 Section times and days

Academic Units will submit time pattern requests for individual sections (e.g. three deliveries per week for one hour in the morning time band). These requests must conform to the university time pattern (Appendix A). Time requests will be at the granularity of the 3-hour time blocks outlined in the university time pattern (morning, mid-day, afternoon and evening) and should include time constraints beyond the contact time of the section (e.g. significant set-up and tear down times).

The set of section time requests for an Academic Unit (including undergraduate and graduate courses) must have at most 35% of its sections constrained to any 3-hour time band of the week. The set of section day requests for an Academic Unit must allow for courses to be scheduled on every day of the week. An Academic Unit must obtain exception from the Provost (or designate), typically by providing an acceptable explanation with the schedule submission, if it has a need to break these constraints.

F.7 Instructor constraints

Instructor constraints are divided into three categories:

- category 1: Mandatory Adjustments
- category 2: Mandatory scheduling constraints where the university must make every attempt to accommodate a request based on the other work-related duties of Instructors such as Senate meetings. The Dean must approve or deny category 2 constraints.
- category 3: constraints that are preferences of the Instructors, such as preferences related to days of the week, will be considered in the assignment of times and locations but not all preferences may be accommodated. Category 3 requests must be submitted each academic year.

Category 1 constraints shall be mandatory scheduling constraints when the Registrar generates the academic schedule. Every effort shall be made to meet category 2 constraints. Failure to meet a category 2 constraint shall be reported to the Dean who approved the constraint to explore alternate solutions.

Each Instructor is responsible for initiating the evaluation of his or her scheduling constraints. In the case of category 1 and category 2 constraints, the Instructor is responsible for providing all requisite documentation to support the request for the scheduling constraint to the Dean.

Within two weeks of receiving the due date for scheduling information of Section F.2, each Dean shall notify all Instructors in their Academic Units of the availability of scheduling

constraints, of the process for applying for scheduling constraints, and of the deadlines for registering scheduling constraint requests.

Each Dean or designate shall

- notify the Instructor of the category assigned to their scheduling constraint request;
- determine the duration for which the scheduling constraint shall be in effect without having the Instructor re-request the constraint, should the constraint be supported (category 1 and 2 only);
- notify the Instructor of the resolution of the scheduling constraint request; and
- notify the Registrar of all supported constraints by the due date for constraints of Section F.2.

Each Dean, whether directly or through a delegate, shall notify the Registrar of all category 3 constraints declared by the due date of Section F.2. In recognition that each scheduling constraint adds to the complexity of creating a schedule, Instructors are expected to make reasonable category 3 scheduling constraint requests.

F.8 Academic Unit constraints

Each Academic Unit can request scheduling constraints for its Instructors to accommodate the operation of the Academic Unit. Having a time when all Instructors are available for regular meetings of the Academic Unit is one such example.

The Dean shall receive and assess these requests from all Academic Units that report to them.

An automatic Academic Unit constraint shall exist to divert 170 minute sections from weekdays where the academic term dates will trigger two or more days in lieu at the end of the academic term. Academic Units can choose to waive this constraint.

F.9 Scheduling constraint priorities and conflict resolution

F.9.1 Priorities

Scheduling constraints fall into one of four groups:

- legal and mandatory according to university policies
- time patterns
- section offerings
- resources

The constraints of each group are as follows, in descending order of priority within the groups.

Legal and mandatory according to university policies

• no subdivision of the constraint hierarchy

Time patterns

• courses must adhere to the university time pattern

Section offerings

- section capacity
- room inventory and room capacity
- Academic Unit preference for the section
- Instructor preference and proximity to Academic Unit offices

Resources

- class characteristics
- credit lectures and room type
- Support Activities of credit courses and academic programs
- non-credit lectures
- Support Activities of non-credit lectures and academic programs

When two constraints in one group cannot both be satisfied in a schedule, the constraint with the higher priority shall have precedence. When two constraints in different groups cannot both be satisfied then a resolution will be managed through the procedure in Section F.9.3.

F.9.2 Appeals of constraint classifications

If an Instructor believes that a scheduling request deserves a different classification than provided in the outcome of the procedure outlined in Section F.7, the Instructor may appeal the classification. If the Instructor believes that the request should be classified as a category 1 scheduling constraint then the Instructor can make the request through the Employee Accommodation Policy and use the appeal procedure of that policy.

The appeal process for all other scheduling decisions shall proceed through the Dean responsible for the Instructor's Academic Unit. Whenever possible and appropriate, the Dean or the Dean's designate shall use reason and informal measures to resolve scheduling conflicts. Informal negotiations shall be informed by the priorities outlined in Section F.9.1 and will take place between the Instructor and a designate of the Dean.

If an informal resolution is not possible then the Instructor may formally appeal in writing to the Dean. In the case where the Dean made the original assessment, the written complaint shall be handled directly by the Provost or a designate of the Provost. The complaint shall outline the scheduling conflict and the impact to the Academic Unit, students and Instructors. The Dean or Provost will investigate the appeal and respond in writing within 7 working days.

F.9.3 Schedule conflict resolution

There will be instances in which a non-mandatory constraint from the Dean is not met in a schedule and the initiator of the constraint wishes to appeal the situation. Other than appealing the classification of the non-mandatory constraint to a mandatory one (Section F.9.2) or revising the constraints submitted by the Instructor, Academic Unit, Dean, or other group, all resolutions can be considered directly with the Registrar.

The Registrar shall use reason to resolve scheduling conflicts informally. Informal negotiations shall be informed by the priorities outlined in Section F.9.1 and will take place between the Deans or their scheduling designates and a designate of the Registrar.

If an informal resolution is not possible through the Registrar's designate then the Dean or scheduling designate may make a complaint in writing to the Registrar. The complaint shall outline the scheduling conflict and the impact to the Academic Unit and students.

The Registrar shall determine if the complaint can be resolved informally by mutual consent of the parties involved. If the complaint cannot be resolved informally then the complaint shall be forwarded to the Provost or a designate of the Provost for resolution.

F.10 Oversight

The Registrar shall report annually on the academic scheduling process. There shall be two levels of reporting to balance a desire to discourage Academic Units from over-constraining the schedule for their own benefit and a desire to recognize that programmatic differences can influence the number and nature of scheduling constraints that each Academic Unit may need to request.

The Registrar shall report aggregate information across all Academic Units to the University Senate through the Senate Learning Teaching Committee to inform on the effectiveness of the scheduling policy. The reporting shall include

- the aggregate number of course combinations requested by all Academic Units and the number of course combinations that were successfully scheduled conflict-free;
- the number of sections whose final enrolment was less than 75% of the section size requested at the time of scheduling;
- the number of room characteristic requests by all Academic Units and the number of requests that were satisfied;
- the number of Instructor constraints (category 3) by all Academic Units by category type, and the number of each type that were satisfied;
- the number of Academic Unit requests made and the number of requests that were satisfied;
- the number of Instructors without one non-teaching day;
- the number of Instructors whose schedule spans more than 8 hours on some day:
- the number of Instructors whose teaching assignments exceed 6 hours on some day;
- any available measures of student satisfaction with the schedule;
- room utilization and seat utilization for each time band and building; and
- any other information deemed relevant by the Registrar.

The Registrar shall report to the Dean's Council the same information as to the University Senate, with that information reported for each Academic Unit under each Dean.

Appendix A: Academic Scheduling Time Pattern

The academic scheduling time pattern includes the following elements:

- 50 minute classes on Monday, Wednesday, and Friday
- 80 minute classes on Tuesday, and Thursday
- 50 minute classes on Monday, Tuesday, and Thursday
- 50 minute classes on Tuesday, Thursday, and Friday
- 80 minute classes on Monday and Wednesday
- 80 minute classes on Wednesday and Friday
- 170 minute classes on any of Monday through Friday

These classes are organized into 3-hour blocks of the day:

morning: 8:30-11:30
mid day: 11:30-2:30
afternoon: 2:30-5:30
evening: 5:30-10:00

The structure of these blocks of times is shown in Figure 1. Numbers in the boxes of Figure 1 represent the time slot for individual sections. For example, 01 that appears on Monday, Wednesday, and Friday at 8:30 represents one section offered in that time. Meanwhile, the 14 that appears on Monday, Tuesday, and Thursday at 8:30 represents another possible section time that follows a different offering schedule. Each day has three columns to represent the times for 50 minute classes, 80 minute classes, and 170 minute classes. Figure 1 then represents 86 possible different time offerings for sections within a week.

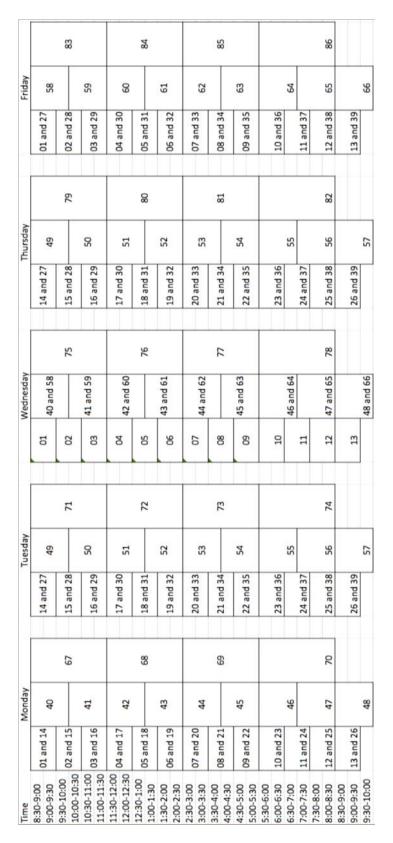


Figure 1 Academic schedule time pattern

Appendix B: Guidelines for Deans on Approving Schedule Adjustments

We provide a set of guidelines on schedule adjustments for Instructors as a reference for the Deans. The guidelines follow and are subject to change year-to-year as the scheduling demands change. Changes to the ongoing guidelines, which will be maintained by the Registrar in consultation with the Deans, will not require a review by the university Senate.

Instructor Constraints Guidelines

Along with their schedule submissions Deans and/or designates are asked to provide the days and times that Instructors are not available to teach. There are three types of constraints and the Dean and/or designate must indicate the category of unavailability.

As there will be many different situations a complete list of types of constraints and their categorization is not possible. The information below is meant as a guideline to help determine the appropriate categorization. Questions about categorization may be directed to the Registrar.

Category I - Mandatory Constraints

Constraints that the university must accommodate that are based on legal, equity, or human rights bases.

Examples:

- Physical disability (temporary or permanent)
- Pregnancy
- Religion

The University has an established Employee Accommodation Policy that sets out the process for requesting accommodation in the workplace. It is expected that the majority of Category I constraints will be of a result of an accommodation request.

Category II - Work Related Constraints

Constraints where the university must make every attempt to accommodate a request based on the other work-related duties of Instructors.

Examples:

- Senate and Senate subcommittee meetings
- Standing meetings for research collaboration; scholarship or grant selection committees; DFA; accreditation; etc. (internal or external)
- Research responsibilities

Category III - Instructor Preferences

Constraints that the university will attempt to accommodate. All requests that are neither category I nor II are classified as category III.

Examples:

- Travel time to campus/commute
- Alignment of schedule with partner
- Child care (unless extenuating circumstances exist and an accommodation under the Employee Accommodation Policy has been approved)
- General preferences

Appendix C: Maximum Class Size Adjustments

Maximum class sizes are established by individual Academic Units. These maxima should reflect realistic student demand for the courses. Historical enrolments provide an initial estimate of that demand. To that end, Section F.4 provides limits on class size maxima increases from year-to-year, unless other explanations for the added size can be provided. Table 1 provides examples on how the rule translates to actual class sizes.

Table 1 Maximum section size set by Section F.4

Prior year enrolment	Maximum class size for next year
10	20
20	30
30	40
40	50
50	60
60	72
70	84
100	120
150	180
200	240