

FOR INFORMATION

S.94-11

SIMON FRASER UNIVERSITY

Office of the Vice-President, Academic

MEMORANDUM

To: Senate

From: J.M. Munro, Chair, Senate Committee on Academic Planning

Subject: Report - Final Exam Scheduler

Date: January 27, 1994

The Senate Committee on Undergraduate Studies was asked by Senate to review exam scheduling. As a result of that process, SCUS recommended that the University move to a system that makes the exam schedule available at the time students register for courses.

The plan to implement this new exam scheduler was received by SCAP for information on January 26, 1994 and is attached for the information of Senate.

SIMON FRASER UNIVERSITY
MEMORANDUM

TO: Senate Committee on Undergraduate Studies

FROM: Diane Whiteley (3211)
Director, Records & Registration

SUBJECT: New Final Exam Scheduler -
Plan for Implementation

DATE: January 26, 1994

In its meeting of June 29, 1993, SCUS approved the proposed Final Exam Scheduler as set forth in SCUS 93-8. Since then, the Systems Section of the Registrar's Office in consultation with Dr. Cameron has designed the production version of the new scheduler based on Dr. Cameron's prototype. We plan to implement the new final exam scheduler for the Summer 1994 semester. Implementation for Summer 1994 means that the schedule will be published in February 1994 in the tabloid, "Course Timetable & Registration Instructions."

For the committee's information I shall briefly describe the salient features of the new scheduler, noting some of the constraints associated with the implementation of the new scheduler.

1. The most significant benefit of the new scheduler is that it allows publication of the final exam schedule before registration begins. Thus, the new scheduler satisfies the university community's desire to have a conflict-free final exam schedule published at the same time as the timetable each semester. Publishing the schedule early will allow students and faculty greater flexibility in planning their semesters.
2. The new scheduler will produce a conflict-free final exam schedule for day courses and for evening courses. The final exams for evening courses will be scheduled in the evening but not necessarily on evening of the week that the course meets. Evening exams will continue to be scheduled in the evening in recognition of the fact that many students enrolled in evening courses are employed full-time during the day and would find it difficult to attend exams scheduled in the day. Rather than scheduling the exams on the evening of the course - a manual process that would create conflicts, the scheduler will be used to schedule conflict-free evening exams by scheduling them freely throughout all evenings of the exam period.
3. Exams for distance education courses will be scheduled manually as they are currently. Roughly speaking, the algorithm for the new scheduler produces a conflict-free exam schedule by

scheduling the exams for courses taught at the same time into the same exam timeslot. Distance education courses are problematic for the new scheduler because there is no course time on which to base assignment of an exam timeslot. Thus, exam times for distance education courses will be arbitrarily assigned in the evenings in the first seven days of the exam period. Manual scheduling of these exams has the same disadvantage as the current system. That is, students enrolled in a combination of regular day or evening courses and distance education courses may not have conflict-free exam schedules. However, since the new scheduler allows for publication of the exam schedule before registration begins, students in distance education courses will be able to avoid conflicts by adjusting their class schedules. Note that it is the student's responsibility to check the exam schedule in order to avoid exam conflicts. Nevertheless, when students cannot avoid conflicts, the Distance Education Office has agreed to assume responsibility for resolving exam conflicts that arise because the exam for a distance education course conflicts with one of a student's other final exams.

4. When required, the new scheduler will have the capability of scheduling one exam for multiple sections of a course. In order to handle this problem the scheduler will choose one of the sections as the *primary* section. The exam timeslot will be chosen on the basis of the course time for that primary section. Thus, because the exam time for other sections of the course will be based on the course time for the primary section, students who enroll in the other sections cannot assume that their exam schedules will be conflict-free. In any case, it is the student's responsibility to check the exam schedule in order to avoid exam conflicts.

5. Since exams are scheduled before registration for the semester begins based on the time of the course, special requests for exam times cannot be accommodated.

6. Once the schedule has been published, an exam may be canceled by an instructor. If a change in the time of an exam is required, the instructor of the course must obtain the permission of the Chair of the department and the agreement of all the students enrolled in the course. Since there is no guarantee that the Schedules Section will be able to book a room at the preferred time proposed, it is strongly recommended that the instructor consult with the Schedules Section on possible times for the exam before securing the documentation necessary for the change. Documentation of the students' agreement to the change will consist of a current classlist with the proposed time for the exam clearly written at the top of each page of the classlist. All students enrolled in the course must sign that classlist.

7. As I noted above, roughly speaking, the algorithm for the new scheduler groups courses taught at the same time and assigns them the same exam timeslot. In all the tests on actual data the scheduler has successfully produced a conflict-free exam schedule in 10 days (40 timeslots) which is the length of the normal exam period. However, since there are 45 possible unique timeslots in which day courses may be taught and only 30 unique exam timeslots for day exams, it is possible that the scheduler could "run out" of exam timeslots and be unable to produce a conflict-free exam schedule. If that scenario occurs, there are several solutions that could be considered.

8. The algorithm for the new scheduler does not produce a balanced schedule, that is, one in which approximately the same number of students write exams on each day of the exam period. Although the Systems Section will modify the algorithm to do some balancing, the new scheduler will not fully balance the schedule in the way that the existing scheduler does. Consequently, there may be a great number of students writing exams on some days of the exam period. As a result, there may be a problem in assigning rooms for the numbers of students writing. Some possible solutions are to dispense with alternate seating on those days when seating is a problem, to seat two exams in the same room at the same time using alternate seating or to set up the gym as a location for writing exams.

9. The scheduler produces an exam schedule that is as conflict-free as possible given the constraints imposed by the need to schedule joint exams for multiple sections and exams for distance education courses. Since the exam schedule is for the most part conflict-free, in the immediate future no exam conflict-checking will be done when students register in courses. Thus, it will be important to emphasize that it is the student's responsibility to check the exam schedule in order to avoid exam conflicts. The telephone registration system will be modified as soon as practicable to include exam conflict-checking and the reporting of a student's exam schedule on inquiry.

C J. Hall, Assistant Director, Schedules

F. Larsen, Director, Systems

A. Tanchak, Manager, Systems