SFU

S.08-55

OFFICE OF THE
ASSOCIATE VICE PRESIDENT ACADEMIC AND ASSOCIATE PROVOST

MEMO

ATTENTION	Senate
FROM	Bill Krane, Chair Senate Committee on Undergraduate Studies
RE	SIMPLIFICATION OF PROCESS FOR DETERMINING FAN X99 REQUIREMENT (SCUS 07-64)
DATE	March 17, 2008

For information:

Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of March 4, 2008, gives rise to the following revision of administrative business process in Admissions:

> To simplify the process by which the requirement for incoming high school students to take FAN X99 is determined, as outlined on the attached document.

SFU

SCUS 07-64

UNIVERSITY CURRICULUM & INSTITUTIONAL LIAISON
OFFICE OF THE VICE PRESIDENT ACADEMIC AND PROVOST

MEMO

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ATTENTION SCUS | TEL

FROM SARAH DENCH, Director, University Curriculum and Institutional Liaison

RE Simplification of process for determining FAN requirement

cc. T. Archibald, M. Dubiel, J. Gray

DATE February 27, 2008

The Department of Mathematics and the UCIL office propose a simplification of the process by which the requirement for incoming high school students to take FAN X99 is determined.

The proposed change would move the determination of the FAN course requirement to an earlier point in the admissions process, make the determination of the requirement more straightforward, improve the learning environment in FAN X99, and allow for clear and early communications with prospective students.

The proposal ties the determination of the FAN X99 course requirement to an examination of grades achieved in Math 11, without disturbing the university requirements of Math 11 or Math 12 for admission to specific Faculties and programs. Grades achieved in high school Math 11 have been shown to be strong predictors of subsequent achievement in Math 12, and in the proposed changes there are also clear options for gaining FAN equivalency at the Grade 12 level should students fail to meet the Math 11 threshold.

In addition to the pedagogical improvements, the proposal seems an appropriate fit with other, recent initiatives to simplify admissions processes for new students, and the changes will make the determination of the FAN X99 course requirement more fair and transparent for students and advisors.

Based on an examination of admissions data undertaken in Student Enrollment, this process change would not significantly change the numbers of new students required to register in FAN X99. The related changes in SIMS and to Admissions business processes could be implemented easily and in a cost-effective way.

Streamlining the Quantitative Admissions Requirement and FAN Exemption

Proposal:
The SFU Mathematics Department and the office of University Curriculum & Institutional Liaison are proposing that Principles of Math 11 be used as the filter by which the FAN X99 exemption is determined (achievement of 70% or higher in Math 11). A second-stage option for students would then be performance in Principles of Math 12 if that grade is higher than the grade received in Math 11.

Issues with the current requirement:
The current quantitative requirement stipulates that applicants from high school must have a minimum of 60% in the math course required by their Faculty (Principles of Math 11 – Arts; Principles of Math 12 – all other Faculties). Students who achieve between 60% and 69% must either register in FAN X99 or write the Q readiness test.

A significant consequence of the two-tiered Math requirement has been that FAN X99 has a very mixed student population—students with Principles of Math 11 only, students with Principles of Math 12, and students with Applications of Math 12. These students are not working at the same level, which provides challenges for effective FAN curriculum design and delivery, and is less effective for student learning.

The Mathematics Department is encountering administrative and systems obstacles when trying to appropriately stream students into FAN X99, MATH 100, and Calculus courses because of the differing math requirements. Students are also receiving confusing advising from non-Math advisors who are unclear about the differences between FAN X99 requirements and other Math requirements. Advisors often believe that an appropriate grade in FAN X99 (minimum C grade) alone permits students to register in Calculus courses, which leads to registration frustrations for students.

Students in Faculties that require Principles of Math 12 are required to complete SFU Calculus courses; FAN X99 is not designed as a Calculus readiness course. Mathematics has recently revised the prerequisites for MATH 100 (Precalculus) to include a minimum grade of B- in FAN X99 to ensure better performance in MATH 100.

Rationale for changing the requirement:
Mathematics has taken time to look at the quantitative skills students bring or lack, and believe it would make more sense to attach FAN exemption to Principles of Math 11:

- The proposed change simplifies the system by which students are filtered into FAN X99;
- Math 11 final grades are available well prior to registration, unlike Math 12 interim or final grades, which are held up by provincial exam marks;
- A strong correlation exists between performance in Math 11 and subsequent performance in Math 12;

- Consistency is created by way of a single type of high school Math admissions requirement, as is the case with the high school English admissions requirement. Attaching the FAN exemption or requirement to the Math 11 grade does not replace the Math 12 requirement for those Faculties that require it;
- Students with Math 11 grades sufficient for a FAN exemption but with Math 12 grades below the grade required by their program will be able to register in Math 100, which is a more appropriate fit than FAN and which is the prerequisite for follow-up Calculus courses;
- Math believes the department will be better able to stream students, provide appropriate diagnostic testing, and advising will be simplified.

Schematic of Proposal: