

FIRST YEAR FOR YOUR INFORMATION (F.Y.I.) CENTRE

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All students, upon commencing the first-year Engineering program, have access to the First-Year For Your Information (F.Y.I.) Centres. These Centres help first-year engineering students adapt to the new social environment of the university and to the new academic pressures of engineering. In the F.Y.I. Centres, second through fourth year engineering students spend time tutoring students and help them develop study skills, study strategies, and study groups.

First-year students need to deal with a number of transitional issues when they enter engineering. These issues include study skills, time management, social, personal and financial ones. Support systems for these issues exist on campus, however, the knowledge of where and how to attain access to these resources is not "common knowledge" among first-year students.

Further, entering students may feel intimidated by the university, the professors, and the administrative systems. First-year students are initially more comfortable with peer to peer contact as in an entering student talking with another first-year student or with a senior engineering student (a student who has completed their first-year engineering program). Students normally view this as a more approachable situation and usually a more "trustworthy" contact. Also, first-year engineering students have a social need to establish bonds with their classmates.

Internal student need assessment surveys and external studies have also pointed to at least two factors that affect retention. First, active participation in study groups increased the probability that a student would be successful in their first year of engineering. The second factor; social groups and intermural sporting activities further strengthened a student's success in the program.

The concept of the F.Y.I Centres was created to address the above outlined items; the transitional issues, bonding issues and coping strategies. The overall objective was to ameliorate the pressures of and attrition from first-year Engineering by addressing these transition issues and developing tutoring support.



Therefore, in 1993, the Faculty of Engineering applied to the Program Development Fund at the University of Manitoba to obtain funding for the F.Y.I. Centres. The project was awarded \$10,000 of budget funding for a one year trial.

The following academic year, 1993-94, the F.Y.I. Centres were started in the Faculty of Engineering. Early feedback and results indicate that the Centres appear to be meeting the overall objectives of the project.

During the year, 25% of the first-year Engineering students regularly attended the F.Y.I. Centres;

- to obtain tutoring help from fellow students and F.Y.I. Program Leaders
- to obtain information about the University and the Faculty of Engineering
- to understand grading procedures, academic appeals, voluntary withdrawal information, etc.
- to obtain support from the F.Y.I. Program Leaders who had recently completed their own first-year program.

The F.Y.I. Centres provided a meeting place where students could receive academic and emotional support from the F.Y.I. Program Leaders, other first-year students and faculty advisors.

Plans and Methods

Several variations and formats were used in the 1993-94 F.Y.I. Centres. A home room concept was used in the first term, whereas a study hall concept was used in the second term. The home room concept consisted of a common classroom, two senior students (F.Y.I. Leaders) dedicated to 35-40 first-year engineering students in a weekly scheduled 2 one-hour time slot or 1 two-hour time slot. The time, location and membership of the F.Y.I. Centres were fixed for each group of students. Therefore, a total of twelve F.Y.I. Centre Home Rooms were required to accommodate the first-year engineering class.

In the second term, a single room was dedicated as a study hall for first-year students. At least two F.Y.I. Program Leaders were available during all study time slots. The study hall was based on a drop-in concept.

Attendance in both versions, home room and study hall, was voluntary. However, a sign up sheet was used to track attendance and the student's academic progress. The atmosphere in the F.Y.I. Centres was deliberately set up as informal with only a few structured sessions in the two academic terms.

The 1994-95 F.Y.I. program has been modified from last year's proposal based on student feedback about using these variations and formats. A survey about the F.Y.I. Centres completed by first-year students at the end of the academic year indicated strong preference for the home room concept and, a desire to change the following:

- increase the number of meeting times each week
- reduce the time to 50 minutes at each meeting time
- add more structured sessions
- maintain an informal atmosphere.

The primary changes to the program are the following: F.Y.I. Centres will be set up in the home room concept in both terms and three 50-minute sessions will be scheduled each week. One out of every three hours will be a structured session focussing in on a list of predetermined topics (eg. orientation, time management, study skills, exam preparation, professional registration, etc.).

F.Y.I. Leader Selection and Training Program

The Office of the Dean, Faculty of Engineering sends out personalized letters to all senior engineering students with a grade point average of 2.75 (out of a possible 4.50) or higher advising them that applications for position of F.Y.I. Leader are being accepted by the Faculty. A three-person committee, composed of the Director of Student Recruitment, the Director of Academic Affairs and a representative from the Engineering Access Program, then review the applications and interview the applicants during the summer months.

The successful applicants participate in training and planning sessions conducted by the Faculty of Engineering and the University of Manitoba Peer Advisor Training Program. For four weeks in August, the F.Y.I. Leaders meet for 2 hours each week to develop the program; schedule, format and content for the F.Y.I. Centres. This planning activity is complemented with team building activities specifically for the F.Y.I. Leaders. The Leaders are assigned to their Centres following this initial training period. Diversity is an important factor in determining which F.Y.I. Leaders are paired together for each F.Y.I. Centre.

A weekend orientation session in connection with the University Peer Advisor Program is held in early September. The University of Manitoba Peer Advisor Program is conducted by university resources with substantial input and direction from the counselling Services and Health Services Department. Listening, Counselling and referral skills are introduced during this weekend. These skills and further university issues and topics, eg. relationships and sexuality, student appeals, conducting meetings, etc., are reinforced weekly at three hour meetings in the first term and at one hour meetings in the second term. This collaborative effort is extremely effective and enlightening for both groups of students. The F.Y.I. Leaders are exposed to new concepts and learning styles unfamiliar to them from their engineering studies.

The F.Y.I. Leaders continue to meet as a group for 1½ to 2 hours each week during the academic year to update and modify the program on a proactive basis. They develop advertising and new promotional activities to increase attendance when it falters.

The F.Y.I. Leaders are the primary tutors/advisors and mentors for the first-year Engineering students. The schedule and topics covered each week are determined by the Director of Student Recruitment, the First Year Advising and Orienting Committee and the F.Y.I. Program Leaders. Two Leaders are responsible for each timetable pattern.

At orientation (the first-year information session organized by the Faculty of Engineering at the start of each fall term), senior Engineering students (Big Brothers/Big Sisters Program) and Engineering professors (Faculty Advisors) are assigned to a group of first-year Engineering students within each timetable pattern. The F.Y.I. Leaders introduce the Faculty Advisors and the Big Brothers/Big Sisters to the first-year students on Orientation day. These senior students and the Faculty Advisors have an open invitation to attend the F.Y.I. Centres throughout the year to meet, tutor, advise and converse with their assigned first-year students.

Each timetable pattern has three 50-minute times blocked off for the F.Y.I. Centres. Normally, within each week, at least one hour is allocated to a relevant topic and the remaining time left as tutorial and group study time. In addition to the earlier outlined topics, the Centres occasionally have speakers from different departments. This allows first-year students to become more acquainted with professors in Engineering. These speakers help the students decide what field of Engineering they would like to pursue in the following year by discussing choices in Engineering and by participating in the occasional tour of laboratories.

At the conclusion of each term, the first-year students are asked to evaluate the program and their F.Y.I. Program Leaders. The attrition rates and marks are examined and compared with the Faculty of Engineering's history in the first-year Engineering program.

First Term Results

The first term results were very positive. Selected first-year student comments about the F.Y.I. Centres were obtained anonymously and a small sample are listed in Appendix A at the end of this article. When first term sessional grade point averages (GPA's) were compared for students who attended the F.Y.I. Centres on a regular basis with those students who did not attend the F.Y.I. Centres, the preliminary results showed that the F.Y.I. attendees had mean GPA that was 0.50 higher. Further, over 60% of the F.Y.I. Centre "regulars" had a grade point average (GPA) of 3.00.

The overall class results showed a marked improvement in the mean grade point average in each course as compared to previous years. This improvement was probably due in part to this year's 77% cut-off average in the admission subjects for Engineering compared to last years 70% cut-off average but also, to some extent, the effect of the F.Y.I. Centres. The improvement is more than can

be reasonably explained simply by the increase in the cut-off average this year.

Further, seven of the nine senior Engineering students who are the F.Y.I. Program Leaders maintained or exceeded their own previous grade point averages (the increases ranged from 0.10 to 0.48).

Full Academic Year Results

After the first year of this program, the following statements summarize the results of the program.

1. Program participants, in the fall term only, had a mean fall-term grade point average of 2.66 compared to 2.47 for the entire first-year class.
2. Program participants, in the spring term only, had a mean spring-term grade point average of 2.89 compared to 2.43 for the entire first-year class.
3. Program participants in both the fall term and spring term had a mean sessional grade point average of 2.91 compared to 2.43 for the entire first-year class.
4. Program participants were three times as likely to be on the Dean's Honor List as non-participants.
5. All F.Y.I. Leaders either maintained or increased their own individual GPA's.

Future Additions to the Program

A summer student, ideally one of the 1994-95 F.Y.I. Program Leaders will be hired under the Program Development Fund and by Challenge 95/CareerStart 95 grants. This student will work on providing assistance to 1994-95 first-year students who are enrolled in 1995 Intersession and Summer Session courses. The student will plan and prepare structured topics for F.Y.I. Centres for the following academic year and prepare an F.Y.I. Newsletter to be sent to the first-year students. This student will also contact all admitted first-year Engineering students prior to the registration dates to welcome them to the Faculty and to answer any general questions and direct the more difficult ones to the appropriate people. This student will also participate in preparing the summer training sessions for the next year's F.Y.I. Program Leaders.

Appendix A

(Random Sample of Student Comments)

Really helpful, the old tests are really good practice. Great way to meet and put faces and names together for the people in the section. My friends in Sciences and Arts are all jealous and think this is a good idea.

I attended FYI at the beginning of the year, which was quite beneficial at the time. But as exams started to become quite frequent, my time for activities was quite limited. I like the idea of going over previous tests.

Stick around. We need you.

The leaders are helpful. The group atmosphere is a good idea. It gives my life structure.

I like it. Every session is like a Friday!

FYI has helped me to deal with first year. Doing old tests together is very beneficial. Its also nice to sit and complain with others in the same boat as myself. Its nice to meet the people in my class too. Its nice to ask my peers questions and also the leaders because they've been through it.

I laughed, I cried, it's become a part of me. It's great to have a place to have most of your doubts and questions answered and individual help on any problems I might have with a course.

It's a great place to come! The tutoring is very helpful! However, we don't get donuts and coffee every week, keep up the good work!

It's great! Doing tests from last year is a GREAT IDEA. Very helpful.

I come because it's easy to get help for trouble subjects. Dean and Monique find the answers for any questions I have even if it's not academic. They went through this "Hell" recently so they know what we're going through and try to help.

Good place to come, eat lunch, and study (do graphics) on a Friday afternoon. I like it better as a study/work area than the "ice-breakers" and videos part.

I think FYI is pretty helpful when we have problems and loss of direction in this faculty.

I think FYI is very good since first year students are overwhelmed by all of the new surroundings and FYI gives a lot of info. on everything.

