Concourse, ESG, ISP Differ from Mainstream

By Eva Moy

While each of the three alternative freshman academic programs offers the same core courses, each one has its own distinctive personal and approach to teaching.

At one extreme, the Experimental Studies Group has the most flexibility and the least structure, according to ESG Assistant Director Holly B. Sweet. Freshmen can work at their own pace, and the typical class size is about three in science classes and 10 in humanities classes.

Generally, students in ESG tend to take less time to complete a class than do students in the mainstream programs, Sweet said. In contrast, "Concourse is the little red schoolhouse," said Concourse Director and Professor of Material Science and Engineering Robert M. Rose '58. The program lends students through a well-structured, interdisciplinary syllabus.

Concourse students take most of their classes together and work together on problem sets. "It's like going to a small school, but not giving up the advantages of MIT," Rose said.

The Integrated Studies Program lies in between the two. The students attend the mainstream freshman core classes, but add hands-on experiences and a look at humanities in a cultural context.

"With technology possessing more and more power to be incredibly destructive, it behooves those charged with its development to be scientifically responsible and productive," Arthur Steinberg wrote in the ISP brochure. Steinberg is the Director of ISP and a Professor of Anthropology and Archaeology.

With the smaller class sizes and individual attention these freshmen receive, upperclassmen told that students are better prepared as upperclassmen. "Some students are just better served in a smaller environment," Steinberg said.

"There is no place to hide" in the small classes, Rose said. "We know what's happening to you." Potential ESG applicants need to arrange an interview with the ESG staff before Wednesday at 5:30 p.m. ISP students are chosen on a first-come, first-served basis.

Experimental Studies Group

"The emphasis in ESG is on learning the material in ways that suit you best," according to an ESG brochure. Students can learn at their own pace and take exams when they feel they have mastered the material. They are required to cover at least the same material as the mainstream courses, Sweet said.

ISP, now in its 26th year, will accept about 45 students. A lottery is held for the 45 to 65 freshmen who usually apply. Although the program is not geared toward any specific majors, many freshmen tend to gravitate toward science, Sweet said.

ESG offers the freshman core classes, as well as a few sophomore-level classes, including Thermodynamics and Kinetics (3.56), Physics III (8.03), and Linear Algebra (18.06). Freshmen must take at least three ESG classes fall term to remain in the program.

The "experimental" in ESG refers to both the teaching style and the freedom to explore new aspects of the material, which are not part of the mainstream curriculum. For example, students can simulate laboratory experiments on the computer. The teaching is "a little more adventurous," Sweet said.

ESG emphasizes students taking control of their education," Sweet said. Students are given more responsibility and are "almost treated like grad students," she said.

The instruction staff is made of 10 full professors, instructors, and lecturers, and 25 graduate and undergraduate students. Undergraduate tutors, top students from previous years, are usually teamed with more experienced instructors for a term, learning from seminars, role playing, student evaluations, and observation of other teachers. ESG will also offer two Freshman Advising Seminars: "Beyond Stars and Planets" and "Gender Roles in Science"

Concourse

Concourse "emphasizes the connections between the different subjects and so enhances both memory and understanding," Rose said in a letter sent to incoming freshmen last June.

For example, students learn the necessary math to support physics, and the chemistry to support biology. The group is small enough that the entire class can spend an extra week on math in order to prepare for the next chapter in physics, for example.

Some of the classes offered in Concourse differ from the mainstream courses. Chemistry includes both the class notes from Introduction to Solid-State Chemistry (1.69) and text excerpts from Principles of Chemical Science (5.11).

"This way we can open doors. You just have to work harder," Rose said.

There were three curricular changes to Concourse this year. Rose said. Calculus (18.02) will no longer be offered fall term, so students have the option to switch from one to the other within Concourse. Biology was added to the spring term's offerings, and will be coordinated with the chemistry which students learn in fall.

In addition, Concourse will offer a version of Introduction to Psychology (7.90) separate from the main lecture.

Concourse also sponsors a freshman seminar entitled "Design of Animal Bodies" and an Independent Activities Period class called "Problem Solving in Science and Technology," Rose said. This 12-unit IAP class features MIT's State University entrance exam questions.

The reputation of the program has changed over the years, Rose said. Ten years ago, students were typically from small towns and apprehensive about the academic load at MIT. Now they are people who are very well prepared, Rose said.

But Rose said he does not want Concourse to become an elite group, just a group of people helping each other. Concourse emphasizes cooperation, and everyone knows everyone else, Rose said. "This is the most fun I've ever had teaching." Integrated Studies Program

The Integrated Studies Program emphasizes learning by doing, in addition to the relationship between technology and society in a variety of cultures. The two required Humanities, Arts, and Social Sciences Distribution classes also emphasize technology.

Students learn how people in other societies may do things differently and also look inward to how their own society works. For example, students compared blacksmithing in America and Japan.

Freshmen also participate in workshops in food preparation, taking clocks and engines apart and reassembling them, blacksmithing, and weaving.

The program is "real nice for students who know they like to tinker," as well as those who want to learn to tinker, Steinberg said.

ISP is probably better suited for engineers, "but some of our best students have been in biology," Steinberg said.

Above all, Steinberg said he wants students coming away wanting to learn — life-long learners.

Committee Studies Race Issues

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so they end up developing mutual respect," he said. "I'd like to see things changed concretely as a result of the work the committee sponsors, Gittins said.

PBE incident sparked committee

Following a national video conference several years ago, Susan D. Allen, assistant dean for residence and campus activities, worked with others to form an ad hoc group to "look at the issue of race relations because we knew there were some problems," Ni said. The group met every few weeks on an informal basis, she said.

"And then, the PBE incident happened and race became more of a campus issue," Ni said, referring to an incident on March 13, 1993 when racial slurs were shouted at four black students from a PBE window.

The idea to form a committee was proposed to Vest and was officially created last spring, Ni said.

Although plans to create a more formal group were already in the works, the PBE incident created "a greater sense of urgency," Gittins said.

"The timing of that incident was ironic." Ni to teach new course

An important aspect of the committee is that many of the members work with race relations in their current administrative capacities, Ni said.

As an example, Ni is teaching a new freshman advising seminar entitled "The Asian-American Experience." Ni said she is teaching the seminar because she feels that "the issues of Asian students have been neglected by the institution."

While Asian students make up about 30 percent of the student population, "there are really not a lot of resources for them to look at their own experience," Ni said. "They only learn about some of a Western, white-Anglo historical perspective.

The course will be most helpful for students who would be interested in looking at what it means to be Asian and Asian-American in America and at MIT," Ni said.