

fraction (5 of 69) indicated that the course had discouraged them from continuing in engineering. Some of these made comments like "Now that I have seen what engineering may be like, I have decided it is not for me."

On the whole, I feel that the course was highly successful. The course was exciting and challenging to teach and I enjoyed it immensely. The response of students was quite gratifying. It seems clear that much of what I tried to build into the course met with reasonable success. Whether any long term benefits will accrue remains to be seen. Certainly the students who took the course have had very early in their course of study a broad range of experience and exposure to engineering that our typical student has never had in the past. Several of the assistants commented that they wished they had had such a course as freshmen, indicating that it would have given them much insight into their subsequent courses.

At the beginning of the semester, at least the first time I taught it, the course consumed a great deal of my time. This was due partly to my inexperience with the course, but partly due to the fact that all of the planning and course develop-

ment had to be done by the instructor. I found no suitable text to use as a guide or to provide problems. (The course just might be pretty sterile if there were!) Moreover, the course needs to be very flexible if it is to respond to the needs and interests of the students. Towards the end of the semester, especially as the design projects got well under way, little time was required beyond that spent in class. Teaching the course the second time was much easier. I made some minor modifications, but used essentially the same material and format as the previous year. This, plus the fact that I then knew how the students would react, reduced my time commitment to a minimum.

Provided assistants are available, I believe that the course could be run in this fashion with as many as 50 students per section. For group projects, there should be no more than 6 students per group. However, as the class size increases one does risk destroying the informal and personal atmosphere of the course. This could defeat the purposes of the course. Also, larger class size probably would mean a greater diversity of interests among the students. This makes it more difficult to select projects consistent with their interests. In any case, the instructor should limit the spectrum of design problems going simultaneously in the course to avoid spreading himself too thin in terms of his own interests and background. □

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