

22 January 1996

TO: S&M Faculty
FROM: Burt Guttman
SUBJECT: ES, S&M, FONS

In December, a little group of biologists met to discuss teaching introductory biology in a way that would serve students of all interests (that is, primarily environmental studies as well as well as laboratory and other biology). There was general agreement that it makes sense to offer a FONS program on the model that several of us have given: a relatively straightforward presentation of math, physics, chemistry, and biology with as much integration as the topics allow, but without emphasizing a special unifying theme. Though I hesitate to speak for all those present (Cellarius, Kutter, Longino, Milne, van Buren, and me), we agreed that we would commit ourselves to teaching such a program regularly. (The sense of the meeting, in fact, was that we *are determined to* teach such a program as long as we can find enough other faculty members, especially chemists, who will also commit to it.) The biologists considered the ES plan to have a regular program that includes a general biology component and agreed that we could achieve considerable economy by scheduling the FONS and ES programs so that one set of lectures would serve both. The logistics of running workshops and labs for both programs are yet to be worked out, but here, too, there should be considerable economy of scale: separate workshops and labs do not have to be invented, and the problems revolve around having adequate cooperation among all faculty members in the program with SITs and student aides.

The chemists, meeting separately, have also agreed that a FONS program would be valuable, especially as a vehicle for transfer students, and some (at least Barlow/Kelly and Beug) will commit to teaching chemistry at the FONS/IES level. In principle, the same sharing plan would work for chemistry, also. Physicists have shown a preference for a different type of program, with more of an integrative theme and less coverage of traditional topics; this is consistent with Michael Beug's suggestion, in his e-mail message of 20 January, that we should not try to fit physics into FONS. (Michael suggests, in a separate note, that it would make sense to do introductory physics as part of a thematic core program.) So if we envision a FONS program that includes only chemistry, biology, and math, this leaves only the question of the math; and I haven't had time to consult with any mathematicians on this point. (My apologies for that.) However, in one version of FONS that Byron Youtz, Clyde Barlow, and I taught several years ago, we handled all the math ourselves, and the program worked well.

I hope to hear responses to these thoughts; it would be well to direct them to the biologists and chemists who stand behind this proposal. (Unfortunately, I won't be at the 24 January meeting because of a prior commitment.)