

FRAMEWORKS AND MODELS IN ENGINEERING SYSTEMS ENGINEERING SYSTEMS DESIGN (ESD.04J / 1.041J)

SPRING 2007

PROFESSOR JOSEPH M. SUSSMAN

3-1-8, U (SPRING)

ASSIGNMENT 1: RESUME/STATEMENT OF INTEREST/COMPLEX SYSTEM IDENTIFICATION

Date assigned: February 6, 2007

Date due: February 8, 2007

Value: -----

This subject is different in some sense than many classes you have taken at MIT. Specifically, the content of the subject, and in particular the semester-long class-wide term project, will be guided in part by the intellectual capital and experiences that the students in the class bring to the table. To that end, we ask you to provide for the next class the following information:

1. Your resume.
2. Your statement of interests relative to this class. Here we suggest in a paragraph or two, certainly no more than half a page, to discuss what you hope to learn from this class and how it relates to your longer-term professional interests. We recognize you have only seen the syllabus and heard one lecture, but nonetheless it would be of value to the teaching staff to understand what you would expect your learnings to be.
3. This is a class about “complex systems”. We ask you to identify and briefly discuss a “complex system” with which you have had personal experience, and for which you have had some responsibility for improving. Please describe this system, how you decided what steps were appropriate to improve it, and the process by which you actually implemented those improvements – to scale this for you, we’re thinking about perhaps a page and certainly no more than two pages.

This exercise—read by the teaching staff but ungraded—will give us some sense of the interests and experiences of the students. It will allow us to begin to tailor the exercises to come, especially the term of the semester-long class-wide project—and begin to get you involved in **systems thinking**.