The design and construction of technology is only the beginning of the challenging process of implementing (and maintaining) complex information systems. In this course, we will explore the technical, sociological, ethnographic, and historical literature that deals with the organizational aspects of information technology. The focus will be on business information systems, but we will also look at scientific, governmental, and health-related organizations as well.

Nathan Ensmenger
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Indiana University

Informatics • I400/I590 • Spring 2013
Instructor:

Professor Nathan. Ensmenger
303 Informatics West
Office Hours: T 9-10 am, Th 2:30-3:30 pm
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Course Objectives:

The purpose of this seminar is to teach you to think very broadly about software development and organizational practice. The basic premise is that large-scale software development efforts only begin with design and development, and that what are often dismissed as social and organizational factors are often the key determinants of the long-term success or failure of a project.

The goals of the course are to make you, as future software developers, project leaders, managers, and entrepreneurs, better prepared to address the entire life-cycle of software development, including the elements often dismissed as being "non-technical".

Course Expectations:

This is a reading and discussion-oriented seminar. The readings are typically short and provocative rather than comprehensive or exhaustive, but you must be willing to do them in advance and be prepared each week to discuss them in class. Each week all participants will prepare a shared set of readings; in addition, once every month each student will be responsible for presenting on an additional reading of his or her choice.

Readings:

The readings are drawn from the very best historical, sociological, anthropological, technical, and business literature, and we will adjust the readings according to the specific interests of the participants. All of the readings will be made available electronically via the OnCourse system or the World Wide Web.

Attendance Policy:

The seminar meets only once a week, which means that attendance is particularly important. If you do need to miss class please let me know in advance.

Grading:

In addition to doing the readings, attending the seminar, and participating in class discussions (30%) each student will be responsible for four in-class presentations (20%), a series of short written response papers (20%), and a final paper of approximately 8-10 pages (30%).
Course Schedule:

The seminar meets weekly on Wednesday mornings from 9–11:30 in Informatics East room 122.

I January 9: Introduction to Organizational Informatics

II January 16: When good technologies go bad …


Chapter 3.

III January 23: What is the point of Information Technology?


IV January 30: Why Software is Hard


Chapters 1–3.

V February 6: Development Strategies I: Agile


VI February 13: The Organizational Politics of Development


VII February 20: Users, Implementation, and IT


VIII February 27: If it ain’t broke don’t fix it: or, why software maintenance is inevitable.


“Is Your Next Language COBOL?” *Dr. Dobbs Journal* (September 18, 2008) [http://goo.gl/Oyqi2](http://goo.gl/Oyqi2)

Eric Bloom, “COBOL will outlive us all” *IT World* (February 12, 2013) [http://goo.gl/FsLmh](http://goo.gl/FsLmh)

See also an interesting discussion of the Bloom article on Slashdot [http://goo.gl/ALSFV](http://goo.gl/ALSFV)

IX March 6: Alternative Organizations I: Just Open Source It!


X March 13: Spring Break!

Party on.

XI March 20: Alternative Organizations II: Why start-ups fail, and why they succeed


XII March 27: Does IT Matter? If so, how?


XIII April 3: Methodologies and Self-Reflection


XIV April 10: Choose your own adventure

Readings TBD

XV April 17: Final Project Presentations

XVI April 24: Big Finish

In which all will be made clear.