

Memes, Genes, and Cenes

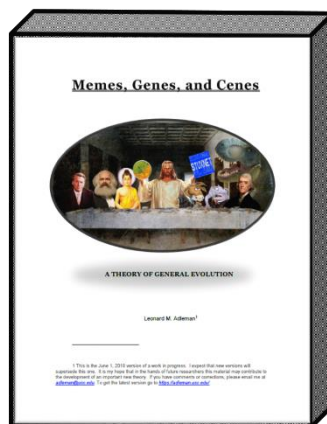
CSCI 599

Professor Leonard M. Adleman

Fall 2018

This is a course about evolution. About how living things, computers, brains, and even books are all engaged in the struggle to survive. It is also about the impact of that struggle on nature, nations, religions, the arts, the sciences, and most importantly you.

The course will be based on my new book “Memes, genes, and cenes”



A draft of the book may be found on my web site: Adleman.usc.edu

A recent 30 minute talk on “memes, genes, and cenes” can be found at: <https://youtu.be/GACtuJDr9Rw>

This is a research course. The main goals are for you to learn about this generalization of Darwin’s theory of evolution, and for you to contribute to improving my understanding.

I would especially appreciate graduate students from non-CS disciplines (e.g. Psychology, Philosophy, History, Political Science, Neuroscience) to help determine how the ideas in the book comport with existing concepts.

Prerequisites:

No formal prerequisites. If you find the topic interesting and are willing to contribute, that is sufficient.

Grading:

I expect to give an A to all who make a good faith effort

Course requirements: No exams. There will be a term paper and a presentation.

Schedule:

Since this is the first time this course will be offered, we have no clear road map of how best to proceed. We will do the best we can. Here is the organization I currently anticipate:

In the first interval: We will read and discuss the book. At the start of each week you will turn in a one-page synopsis of the portion to be discussed that week.

In the second interval (once the book has been read): You will hand in a short (say 2 pages) description of your term paper. You will lead a discussion describing your initial thoughts and possible approaches. The rest of the class will provide their ideas in an effort to help you write a good paper.

In the third interval: You will make a present about your term paper to the class.