# HISC 131: Science, Technology and Law Spring Quarter 2011 Prof. Tal Golan

tgolan@ucsd.edu

Modern society has become increasingly dependent on science and technology. Exploring various case studies, from expert scientific evidence such as fingerprints and lie-detectors, to technological feats such as biotech and the internet, we will examine how science, technology and law interact to maintain progress, rationality and social order in modern society.

Time and location: TuTh 9:30-10:50 in Solis #110

**Professor Golan Office hours**: Tu 11-12, or by appointment. H&SS bldg room 4044

Teaching Assistant: Kris Nelson krisnelson@ucsd.edu Office Hours: TBA

#### Week 1 Introduction

#### Mar 29 Introduction

Goldberg, Steven, Culture Clash: Law and Science in America, 1-25.

### Mar 31 History

Golan, Tal, The History of Scientific Expert Testimony in the English Courtroom, *Science in Context* (1999) 12:7-32

#### **Week 2: Scientific Evidence**

# Apr 5 What Makes Evidence Scientific? The case of Fingerprints

Simon Cole, "What Counts for Identity? The Historical Origins of the Methodology of latent Fingerprint identification," *Science in Context* (1999) 12:139-172

### Apr 7 What Makes Evidence Unscientific? The case of the Lie-Detector

Tal Golan, Laws of Man and Laws of Nature, 211-253.

#### **Week 3: Visual Evidence**

### Apr 12 Differentiating between good and bad science

Golan, Laws of Man and Laws of Nature, Epilogue, 254-264 US Supreme Court Opinion in Daubert v. Merrell Dow Pharmaceuticals, Inc.

# Apr 14 Photographs: what you see is what you get?

Jennifer Mnookin, The Image of Truth

#### Week 4: Medicine and law

#### Apr 19 Imaging technologies

Tal Golan, Laws of Man and Laws of Nature, 175-210.

### **Apr 21 Insanity Defense + Malpractice**

Reading TBA (check on the website)

### Week 5 Regulation

# Apr 26 Questions of life and death

Jasanoff, Science at the Bar, 163-203

# Apr 28 Regulation:

Sheila Jasanoff, Science at the Bar, pp 69-92

#### Week 6 Mid-Term Exam

### May 3 Tort

Peter H. Schuck, Agent Orange on Trial, excerpts

May 5 Midterm Exam

### Week 7 Society

# May 10 Eugenics

Davenport, Eugenics (1910)

### May 12 Religion

H.Allen Orr, Devolution: Why intelligent design isn't, New Yorker, Mar 30, 2006.

### Week 8 Economy

### **May 17 Patents**

Daniel Kevles – The Gene Patent Controversy

The Gene Patent Controversy - 2010 update

# May 19 Biotech

Michael Spectre, "Decoding Iceland," New Yorker, 18, 1999, 40-50

### Week 9 Technology

### May 24 Pharmaceutical

David Healy, Shaping the intimate, *Social Studies of Science* (April 2004) 34:219–245

### May 26 Internet

Jack Goldsmith and Tim Wu, Who controls the internet? 1-48.

### **Week 10 Future Challenges**

### May 31 Global Warming

Massachusetts v. Environmental Protection Agency

Jun 2 What have we learned

Final examination: Date and Location TBA

### **Course Policies**

- Full attendance in all classes is expected of all students.
- Students are required to read the assigned readings and submit their comments online before each meeting, by 9 a.m.
  - The comment should be no longer than half a page.
  - The comments will be read and checked, but not graded.
  - Late submission will not be accepted.

### Grades

Attendance + weekly commentaries on the assigned readings: 20%.

Mid-term: 40% Final exam: 40%

## **Bibliography**

### Required Books:

- 1. Tal Golan, Laws of Man and Laws of Nature: A History of Scientific Expert Testimony (Harvard University Press, 2004)
- 2. Sheila Jasanoff, *Science at the Bar: Law, Science, and Technology in America* (Harvard University Press, 1995)
- \* All other readings will be posted in the