# HISC 131: Science, Technology and Law Fall 2012

# Prof. Tal Golan

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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 2-3:20 p.m. CSB 005

**Professor Golan Office hours**: Th 1-2 p.m., or by appointment. H&SS bldg room 4044

**Teaching Assistant**: Theodora Dryer tjdryer@gmail.com

#### **Week 1 Introduction**

## **Sep 27 Introduction**

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

#### Week 2 Scientific Evidence I

## Oct 2 History

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

## Oct 4 Differentiating Between Good and Bad Science

US Supreme Court Opinion in Daubert v. Merrell Dow Pharmaceuticals, Inc.

#### Week 3 Scientific Evidence II

## Oct 9 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

## Oct 11 What Makes Evidence Unscientific? The case of the Lie-Detector

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

### **Week 4 Visual Evidence**

## Oct 16 Photographs: what you see is what you get?

Jennifer Mnookin, The Image of Truth

## Oct 18 Imaging technologies

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

#### Week 5 Medicine and law

## Oct 23 Insanity Defense + Malpractice

Reading TBA (check on the website)

## Oct 25 Questions of life and death

Jasanoff, Science at the Bar, 163-203

#### Week 6 Mid-Term Exam

#### Oct 30 Midterm Exam

## Nov 1 Federal agencies

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

## Week 7 Regulation

Nov 6 Tort

Peter H. Schuck, Agent Orange on Trial, excerpts

Nov 8 Eugenics

Davenport, Eugenics (1910)

## Week 8 Society

## Nov 13 Religion

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

## Nov 15 Patents

Reading TBA

## Week 9 Technology

#### Nov 20 Pharmaceutical

Ben Goldacre, The drugs don't work: a modern medical scandal *The Guardian*, September 21, 2012

Nov 22 Thanksgiving - No Class

## Week 10 Current Challenges

Nov 27 Biotech

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

## Nov 29 Internet

**TBA** 

#### **Week 11 Conclusion**

## Dec 4 Global Warming

Massachusetts v. Environmental Protection Agency

Dec 6 What have we learned?

**Final examination: Home test** 

Posted: Dec 6, 4 p.m. Deadline: Dec 10, 8 a.m.

## **Course Policies**

- Full attendance in all classes is expected of all students.
- Students are required to read the assigned readings and submit their comments on-line by 1 p.m. before each meeting.
  - Comments should be no longer than half a page.
  - 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 on line @TED