

Texts for this course are

“**Analytical Methods for Lawyers**” by Howell E. Jackson, Steven M. Shavell, W. Kip Viscusi, and David Cope, Foundation Press, 2003. This a text created for a new first-year law course at Harvard designed as a “...gateway to ...upper level offerings[,]” and requires no previous law training. We will cover the following parts: Chapter 1, Decision Analysis; Chapter 2, Games and Information; Chapter 3. Contracting (brief overview only); Chapter 6, Microeconomics; Chapter 7, Economic Analysis of Law (brief overview); Chapter 8, Fundamentals of Statistical Analysis; and Chapter 9, Multivariate Statistics. (We omit Chapter 4, Accounting and Chapter 5, Finance, which are technical in nature.) The chapters on statistics will form a good introduction to the second text.

“**A Concise Guide to Evidence-Based Psychiatry**” by Gregory E. Gray, M.D., Ph.D., American Psychiatric Publishing, Inc., 2004. The psychiatry here is secondary (except for the references which would be helpful to practitioners); this is a short, dense pocket-sized text on “evidence-based medicine” which is essentially the application of statistical methods to determining the best course of treatment. The identical principles are applicable in many non-medical contexts. There are passing references to powerful statistical techniques which go beyond an introductory course. Here is a list of the chapter headings: 1.Introduction to Evidence-Based Medicine; 2. The 5-Step Evidence-Based Medicine Model; 3. Asking Answerable Questions; 4. Searching for Answers (This chapter is rather specific to medicine since the web sources listed are mainly medical. A problem in the course will be to see what sources one might find for other kinds of questions.); 5. Clinical Trials; 6. Systematic Reviews and Meta-Analyses; 7. Clinical Practice Guidelines; 8. Diagnostic Tests; 9. Surveys of Disease Frequency; 10. Studies of Risk or Harm; 11. Studies of Prognosis; 12. Evaluating Your Performance; 13. Learning and Practicing Evidence-Based Psychiatry; and 14. Teaching Evidence-Based Medicine to Psychiatry Residents. (The last few chapters are also rather specific to medicine but do contain some important general principles.)

There will be one mid-term exam, a final exam, and exercises, but much of the grade will be based on student projects (to be discussed in class).

The course meets Tuesdays and Thursdays, noon to 1:20 pm, in room 4C4, DRL. The first meeting is Thursday, September 7; last class officially is Tuesday, December 19

Math 180, Fall 2006, Professor Gerstenhaber; Syllabus page 2.

In the following, “AM” refers to “Analytical Methods ...”; “CG” to “A Concise Guide ...”.
The first lecture is Thursday, September 7. We will begin Chapter 1 of AM. After that, “Week of” refers to Tuesdays

Week of

September	12.	AM:	Chapter 1 (end); start Chapter 2
	19.		Chapter 2 (end); start Chapter 3
	26.		Chapter 3 (end); Chapter 6
October	3.		Chapter 7
	10.		Chapter 8
	17.		Chapter 9
	24.		Review for midterm; midterm on October 26
	31.	CG	Chapters 1, 2, 3
November	7.		Chapters 4, 5
	14.		Chapters 6, 7
	21.		Chapter 8 (Thanksgiving is November 23)
	28.		Chapters 9, 10
December	5.		Chapters 11, 12
	12.		Discussion, review, student presentations
	19.		Tuesday only, last class. Discussion, review, student presentations