

**Problem Set 3**  
**Due in Class Session 22**

1) Consider the performance of three web sites involving products that are sold to consumers.

- <http://www.apple.com/itunes/> is a web site that sells music to be downloaded to a computer or an i-pod. The business is very successful so far.
- <http://www.pets.com/> was a web site that sold pet products ranging from bags of kitty litter and dry dog food to jeweled collars for cats and fancy blankets for poodles. The business failed. It remains best known for its commercials featuring a dog-like sock-puppet.
- <http://www.godevil.com/> is a web site advertising duck hunting boats designed to maneuver in very shallow water. Warren Coco, the inventor of the Godevil considers the website successful so far.

a) Discuss the differences in product and business model that might explain why the first and third of these websites (and their businesses) are successful but the second web site (and its business) failed. It may be useful to look at the first and third web sites, but, alas, you won't be able to look at the second website.

b) How, if at all, would your answers in (a) change if search engines like Google did not exist.

2) In "A Few Degrees of Separation", Joe LeDoux describes the purposes of and relationships among the sensory thalamus, the sensory cortex and the amygdale. Suppose that LeDoux were to read Nick Murray's advice to an aspiring stockbroker in "Planning for the Five Great Goals of Life". Explain how LeDoux would use neuroscience arguments to explain how Murray's advice actually worked.

3) In "How Experts Differ from Novices," the authors write:

"Experts' knowledge cannot be reduced to sets of isolated facts or propositions but, instead, reflects contexts of applicability: that is, the knowledge is "conditionalized" on a set of circumstances."

a) Select an example from the Beamish-Levy-Murnane reading on car repair (February 10) and show how this idea applies.

b) Discuss the relationship between this idea and computerized “Expert Systems”. (One reading on expert or knowledge-based systems is the Randall Davis reading (March 10)).

4) The last problem in this problem set involves experimenting with the ETS Criterion software for machine graded essays.

- Begin by going to the sign-up sheet, an Excel spreadsheet posted on the course web site under April 19, 2005. Claim an unused ID/password by filling in your name.
- Go to <http://criterion.ets.org/cwe/student> and log in using your ID/password.
- Following instructions, choose one of the two essay topics, write an essay in the allotted 40 minutes, and submit it for grading.

Please start this early because there are sure to be glitches at the start. When you encounter a glitch, send an email to the TA and the instructor and one of us will fix them.