1. When should you start to study the user? Name at least three situations.

2. Comment on the iPhone5s (device and iOS, the newest iPhone) with respect to each aspect of the ABCS.

3. Expand any 5 of the following acronyms or names: (more than 5 correct = 5, wrong ones count negative)
   - HCD: The name of the instructor
   - GEMS: The name of the TA
   - UCSD
   - IxD
   - IRB
   - JND
   - PQ4R
   - S-R
   - UX
4. One version of Fitts’ Law is \( \text{Time} = 70 \text{ ms} \times \log_2 (\text{target distance} / \text{target size} + 0.5) \). Note what changes may be necessary to this law when using a thumb on a smartphone.

5. Based on material in the books, give two suggestions when you design a cell phone for older users.

6. Name two principles of visual grouping, and note how can you use these principles to improve usability or decrease errors when you design a webpage.

7. (a) What is a JND? (b) How can you apply this concept to interface design?
8. Imagine you are designing an app for Google Glass (glasses with a built-in display and CPU, shown here), such as a calendar (but you can choose a different app if you describe it first). How can you decrease a risk associated with the use of the app using aspects of visual perception?

9. Consider these two learning curves for an interface. Note an example interface where you would like to see the first curve and an example where you would like to see the second curve.

10. Note three ways that you can help a user learn how to use your interface based on your lab and the book.
11. Describe a way based on human memory to make an 8 letter or digit password that is easier to remember for students.

12. What is feeling of knowing and why is it important for designing user interfaces?

13. Note two stimulus-response compatibility problems with this elevator’s interface.
14. What is information scent, and why is it important for web site design?

15. Note 5 ways noted in the books or in your labs that you can make material on your web site easier to read.

16. Given this schematic view of a user, note 4 ways that errors can arise.
17. Note up to 4 mistakes with this report snippet and number them.

Robert’s performance got much worse with time as shown in Table 1.

Table 1. Percent correct for the fifth smartest subject, Robert.

18. What is an advantage of running a usability study in a quiet room, and what is an advantage of running it in a cafeteria?

19. Your perception lab was to provide background on running usability studies and to give some insight on how to improve web sites. Here is a picture of a web site. Suggest two questions about how to improve it that a study like your perception lab (or the default lab, if different) could start to address.
20. Fill in this Internet meme as a useful instruction for next year’s class members:
That is, what is a surprising fact/observation/comment that students in 331 or designers might find surprising that is particularly and poignantly true? What is a take-away message from this course so far? The grader will be looking for insight in the comment, not just surface truth.

Bonus points
B1. Who wrote the forward to the book? First, last name

B2. Who wrote the preface to the Foundations to User-Centered Design book? First names and last names.

B2. Name an author(s) of a paper you read for the course and the topic of their paper.