1. What are two payoffs for designing with the user in mind?

2. Comment on Facebook’s design of privacy settings 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
   CREAM
   JND
   S-R
   P4QR
   NTSB
   The name of the instructor
   The name of the TA
   The authors of the book (all of them) or the author of the foreword
4. One version of Fitts’ Law is \( \text{Time} = 70 \text{ ms} \times \log_2 (\text{target distance} / \text{target size} + 0.5) \). Note three ways with hardware or software to make menubars faster to use.

5. Based on material in the book, give four suggestions for how to help users who are sitting to sit better.

6. (a) Fill in the names of the four empty table cells related to Signal Detection Theory. (b) Explain what they mean with respect to a recommender system such as Netflix or YouTube suggested movies, or Reddit’s front page.

<table>
<thead>
<tr>
<th>Response \ Signal Present</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. What is habituation and what role does it play in the design of alarms?
8. How can you help direct the user’s attention on a GPS/SatNav display using aspects of visual perception?

9. What curve is this? Why does it look like this?

10. Why are multiple-choice exams seen as easier than short answer exams?
11. Using terms from ACT-R (shown below), describe how distractions can disrupt learning.

12. Name two of Grice’s maxims, and give one example per maxim of an interface that violates that maxim.

13. How can you help users process a page of text on a web site? Note four ways.

14. What is the availability bias and why does it appear on the exam?
15. Describe one factor that influences problem solving.

16. Name two errors that gave rise to the Kegworth air disaster that are likely to contribute to future disasters, not counting generic pilot error.

17. Revise this bit of report, noting up to 4 mistakes and numbering them.

The users’ performance got much worse with time as shown in Table 1.

![Graph showing user performance over time]

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

18. Which type of memory (e.g. long term memory) is involved in the following activities (only need one type for each)

1) Allen tells his email address.

2) Bob recognizes the IST building.

3) Chris forgot to lock the door when he left.

4) David is riding a bike.
19. Explain the Pop-out effect and explain the implications of this effect for your project.

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? You may not use any existing memes presented in a lecture.