Instructions – all students must complete parts 1 and 2 of this assignment. Graduate/Honor students must also complete part 3.

Part 1: Heuristic Evaluation (undergraduate 60 points, graduate 40 points)

Choose one of the following websites for our university, college, or department:

- www.my.sc.edu
- www.cse.sc.edu
- www.cec.sc.edu
- Or any other USC department or college website, you think, can be improved

Conduct a heuristic evaluation on one of these sites. Using a format similar to below, **describe 10 usability issues**, identify which heuristics were violated (may be multiple) and apply a severity rating. Then, identify the **top 5** usability violations from your table, and suggest (briefly) how it could be better designed.

Description of Usability Issue	Heuristic(s) Violated	Severity Rating (1 = low; 5 = high)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Part 2. Experiments and Usability Testing (undergraduate 40 points, graduate 30 points)

An HCI research wants to investigate the educational benefit of robot tutoring sessions. Students are split into two groups. Half received regular tutoring sessions with the teacher. The other half received tutoring sessions with a robot. Both groups received the tutoring every Monday, for two hours, for four weeks. Then each student is given the same exam, and scores are compared.

Please answer the following (bullet point format is fine):

1. *Is this a between or within subjects design? (10%*part2 points)*

2. *Which is the experimental group? Which is the control group? (10%*part2 points)*

3. *What is the independent variable? (10%*part2 points)*

4. *What is the dependent variable? (10%*part2 points)*

5. *List three additional dependent variables that the researchers could measure. (30%*part2 points)*

6. *Some experimental controls were put into place. Think of three additional confounds that should be controlled for. (30%*part2 points)*

Part 3. Graduate Students Only (graduate 30 points)
You were hired as an HCI researcher to investigate the usability of a grocery self check out system (i.e., at Kroger or Publix, there are self-check out kiosks). The company is interested in understanding (1) what do users think about the self-checkout system? (2) can the users use the system easily; (3) does the current system meet HCI design principles/requirements. Think of three usability evaluation methods that can answer each the questions above (i.e., one evaluation method to answer each question). _Briefly_ describe why you chose these three methods (what are the benefits). Note: you do not need to discuss _how_ you will conduct each evaluation; rather I want to see your thinking process for _why_ you would use certain evaluation methods to answer your research questions (see format below).

1. What do users think about the self-checkout system?
   a. Evaluation method: _____
   b. Why you chose this method (a few sentences):

2. Can the users use the system easily
   a. Evaluation method: _____
   b. Why did you chose this method (a few sentences):

3. Does the current system meet HCI design principles/requirements?
   a. Evaluation method: _____
   b. Why did you chose this method (a few sentences):