**Human Computer Interactions**

**COSC 605**

Spring 2013

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructions

This exam contains 4 essay questions. The value for each question is mentioned in parenthesis. Please answer all questions. Good luck!

1. Amazon Inc. is interested in increasing its presence in universities. It hopes to replace hardcopies of textbooks in the library with e-books. To that effect, they have commissioned you to carry out a longitudinal study to compare the effects of student learning with the use of Amazon Kindles versus hardcopies of textbooks. Describe how you would design the longitudinal study for Amazon. Be sure to set out: your research question, dependent and independent variables, hypothesis, measurable outcomes, sampling techniques, assumptions, possible bias and limitations of the study. (40 points)
2. Amazon Inc. is interested in extending your study abroad. They would like to get feedback on the effect of student learning with the use of the Amazon Kindle and hardcopy of textbooks in a developing country like South Africa. They have approved your experiment design (from the prior question). To assist you in the data gathering process, they have sought out collaborations for you with several professors from the School of Computer Science at Witswatersrand University. However, several collaboration challenges have to be overcome before the study can progress. Explain some of these challenges with respect to this study and suggest ways to deal with these challenges. (20 points)
3. The State Government of Utah (<http://www.utah.gov/index.html>) has recently gone online. However, their website has not been well received. Please conduct an analysis of their website to outline some of their challenges and offer some ways to fix it. (20 points)
4. Breakout Results LLC (<http://www.breakoutresultsllc.com/>) is a Management Consulting Company. They have recently developed an online presence to compete with other consulting firms. However, they have been losing money since their site went live. Please conduct an analysis of their website to outline some of the ways they can improve the website. (20 points).