4 Credit Hour Assignment

Each individual taking the class for 4 credit hours will complete a small VR research project. Your task is to develop an idea for something that you can test in virtual reality, create a program or project add-on to test it with, run several people through your study and write up the results. You will first submit a research project proposal that will include a summary of previous scientific literature on your topic of interest, hypotheses (research questions that you will answer with your study) and a questionnaire to test your hypotheses that you will administer to subjects that participate in your study. After you have run your subjects, you will turn in copies of the questionnaires that you gave to your subjects and a short summary of your results. At the end of the semester, you will submit a short paper summarizing the findings from your mini research project.

- Read a few papers on a topic -- present at least 3-5 papers on a topic to investigate in a written paper the style of a lit review.
  - Doesn’t have to be connected to your final project!
  - Can be papers on VR research or research from another field on a topic that you can test in VR
- Propose and create a scenario (test) and a questionnaire for testers
  - Get TA input on the proposal and questionnaire before turning it in!
  - One page paper lit review, proposal & subject questionnaire due by November 12th (we’ll get it back to you in about a week)
- Test on enough people
  - At least 1 TA
  - At least 1 person with no experience in VR
  - At least 5 people total (10 preferred)
  - Do not test on your team members
  - Copies of completed questionnaire responses from your subjects and a short summary of your results (1-3 paragraphs) are due by December 3rd
- Final deliverable - minimum two page paper with background (including lit review, justification for your project and hypotheses), methods, results, discussion (including ideas for further research) and conclusion sections. The paper and a copy of the program you used for testing will be due the day of the final project presentation and submitted on Compass.
  - It is fine to reuse the background section from the first paper you turn in and the results section from what you submitted with the completed questionnaires
  - Your work may be featured on our course webpage!

Keep in mind that this work is to be done individually, and should be disconnected from your group’s work in the final project. There are two ways you can do this:
- Keep your proposal and test completely separate from your final project
- Create a clearly demarcated portion of your final project that only you work on, and point to it in your write-up.