

## Service-Learning Option: Report and Presentation

After you participate in the Habitat for Humanity Build Day, you are asked to **write a 5 page report** about an application of probability of statistics related to Habitat for Humanity and construction. Some possible examples are:

- investigation of data related to volunteer rates at different Habitat for Humanity affiliates and factors that contribute to greater volunteer participation at some locations than others
- investigation of data for material properties for one or more construction materials used on site
- data-based investigation of flood damage and flood occurrence in the Jamestown area in relation to the September, 2013 floods.

The topic is up to you!

What you should do:

- Decide whether you will work with a partner or by yourself.
- Decide on a topic. Discuss your topic with the instructor over email or during office hours before starting to work on the report. There is no deadline for this step, but if you haven't done it before spring break you are falling behind.
- Gather data on your topic of interest. Explore different ways of plotting and presenting that data.
- Write a report that:
  - a. Describes the application of probability of statistics you are looking at how it relates to our project with Habitat for Humanity
  - b. Presents key data using plots and figures. What variables are you interested in? What are the relationships (correlation etc.) between the key variables you are looking at? Are there are important trends in these variables with respect to time or space? What can we learn from these data?
  - c. Provide recommendations to Flatirons Habitat for Humanity on the basis of your data. Some ideas of possible recommendations: what action should be taken to improve some aspect of the project? Are there additional sources of data that could be collected?
  - d. Provide recommendations to Prof. Liel about the Service Learning option.
    - i. What did you like about the Habitat for Humanity build day? What did you dislike?
    - ii. Was the report writing valuable for your learning? Explain why or why not.

You are also asked to **participate in a short group presentation on Tuesday April 7**. Each build day group will prepare 10-15 slides. The first few slides should provide an overview of the work you did and what you learned during the build day. After these introductory slides, each report should be summarized in a single slide.

### Details:

The text of your report should be single spaced. All materials, including figures should be included within the 5 pages. The reference list can be outside the limit. The report should be submitted online via the dropbox. You are responsible for making sure that you appropriately cite your sources, including where/when/how you got your data, and properly attributing figures and tables

if you didn't make them yourself. Failure to properly attribute sources will lead to a 0 on the assignment, so be sure you know the rules and check with Prof. Liel if you don't.

**Report and Presentation Grading:**

- Writing (grammar, paragraph structure, clarity of expression) & organization (headings, etc.): 35%
- Data collection, data analysis and figures: 40%.
- Appropriate use of references and citations: 10%
- Participation in group presentation: 15%

**Other Helpful Hints:**

Don't be afraid to use headings in the text if it helps you organize your writing. Best practices in technical writing involve numbering and captioning figures.