## General Turn-in Instruction

To complete this homework set, you are required to do the followings. Your work must be typed in LATEX using the course presentation template. The progression of your midterm presentation is to be "recorded" by making a git folder specifically for this midterm presentation homework set. The burden of proof is on you, and if your git commit history is sparse, then you may be liable for a penalty. A paper copy of the PDF output of your LATEX file is to be submitted to your instructor in class on the due date. After submitting the paper copy, but before the end of the due date, you will upload your work to your github by making a remote repository specifically for the homework, and post the link to the repository at the designated Discussion forum in Blackboard by making a thread just for you. The repository name in your github should be 550400.workstatement.final and the discussion forum thread should be named YourFirstNameMiddleInitialLastName, e.g., BarachObama and WillardMRommey. You have till the end of the due date to finalize your github repository. However, any commit made after the class time of the due date will be inadmissible. Finally, upload your video file to your Discussion Forum thread, i.e., YourFirstNameMiddleInitialLastName. Your attention to details in following this instruction will be critical, and if not followed exactly at the time of collection, the homework set may be graded at 90% of the full score.

## Midterm Presentation\*

This major component of this course is training and practice in giving good talks, presenting orderly information in a short time. It's an art form requiring practice and discipline. You will want to be good at giving a talk by the time of your midterm presentation. Public speaking is, for many, an intimidating experience at first, so it helps to have an orderly process for getting used to it. Here are some suggestions on how to prepare a presentation. The secret is repetition. The idea is to hold regular practice sessions within your project, paying attention to timing and structure. And don't worry about it if initially you mumble and fumble. Practice makes perfect!

Your particular assignment in this homework set is to prepare a 20 min talk about the project that you wrote in the work statement. This has two parts:

- making beamer/LaTeX presentation slides
- making a presentation video of giving a talk

By making a video, I mean that you have a movie file in which the screen shows the slide that you are currently talking about, and in the background, your voice explain what is on the slide. You do not need to make it so that yourself actually appear in the movie but I do not stop you from doing so.

You should make your recording as good as possible, and try multiple times before finalizing the recording. How should you make a video recording? For OSX, QuickTime Player does make a simultaneous recording of voice and screen, and it comes with OSX by default. You can find it

<sup>\*</sup>Some of these materials are from [3].

under the usual Applications folder. Unfortunately, for Windows, QuickTime Player does not have the same functionalities as the OSX version. However, there are ample free softwares that satisfies your needs. For example, check out this (http://camstudio.org).

The time requirement is strict in a sense that you should not go over 20 minutes. Making it exactly 20 minutes is hard. To give you what is acceptable, I would say 18 or 19 minutes are okay if your presentation naturally breaks there, but 15 minutes is too short in any case. If you find yourself that you do not have enough materials to talk about, then that probably means that you have not given your project a serious consideration.

Roughly speaking, the contents of the talk should be a presentation version of the work statement and any preliminary progress you have made in your project. A template for formal presentations is shown next. Don't go overboard in preparing colorfully dynamic and impressive graphics—except to the extent that the graphics help directly to explain the technical material and purpose of the project.

- INTRODUCTION (5 minutes, approximate) (crystallized introduction, clarity for average listener)
  - Title, sponsor identification, participants
  - Sponsor's business, relevance to problem area
  - Description/explanation of problem
  - List of deliverables
- HEART OF TALK (10 minutes, approximate)
  - Team's approach, in descriptive non-specialist language
  - Research accomplished discuss analysis/results oriented toward specialists
- CONCLUSION (5 minutes, approximate)
  - Check against list of deliverables
  - Discuss work remaining to be done, negative results
  - Recommendations for future research

For the style guide for your presentation, please see Chapter 15 (Speaking about Multivariate Analysis) of [2].

## References

- [1] E. Bender. An Introduction to Mathematical Modeling. Dover Publications, 1978.
- [2] J. Miller. The Chicago Guide to Writing about Multivariate Analysis. The University of Chicago Press, 2005. 2
- [3] M. Raugh. UCLA IPAM RIPS Manual, 2012. 1