Each item will be turned in on the indicated due dates. “*” indicates a major item that you must “pass” before you continue.

**I.0. Team Assignments (Th Jan 21)**

Schedule a team meeting ASAP at which you need to identify two survey projects that your team could actually implement over the course of the semester (to complete I.1 below). See the separate handout on project ideas and proposals, for examples and general expectations.

**I.1. Propose Two Topics (Th Jan 28)**

Identify two survey projects that your team could actually implement over the course of the semester. **One project should involve surveying undergraduates on campus, and the other involve something else** (an off-campus survey of people, a survey of things such as library books, accounting records, cars, buses, etc.). Whatever you choose to propose, both proposals will be graded on how interesting and feasible they are.

Previous groups have proposed interesting but ultimately not feasible ideas, like scraping email addresses from other universities’ websites (or any websites for that matter). Another factor to consider is that our samples of undergraduate emails are usually restricted to small sizes (about 500, which will typically yield about 100 responses) and can only be restricted based on broad categories like class year or college. So if you’re hoping to study “rare” groups (trilingual students, smokers, etc.) you will have to use a more creative design. One strategy is to get another list from an interested party. For example, you may convince an academic department to help you administer a survey targeted to their majors.

**Format:** For each topic, each team should submit a one- to two-page proposal. Each proposal should begin with a title that indicates the topic, and the names of every team member. The section headings of the proposal should include the following three items.

A. Why is this topic interesting? Why does this survey need to be done now?

B. What question(s) do you propose to study? Give a brief answer that would have been understandable by a non-statistician. These are not actual survey questions, but well-defined research questions. For example:
   - Are CMU first year students satisfied with the mandatory meal plan?
   - How many on-street parking spots are available on a typical weekday afternoon?
   - How often do smokers violate “designated area” regulations?

Questions like “What are the attitudes of CMU students about dining options” are a good start, but too broad. Get more specific! (Attitudes toward what? The cost, the venue options, the hours, etc.? Could you assess attitudes about a relevant policy change?)

C. Identify potential sponsors/clients or interested parties. If your research is about CMU, who would be a natural client? For example, the CS department would be interested in surveys about CS students. Dining services would be interested in surveys about meal plans. Think about the administrative units on campus that would be interested in the results, and who might be able to provide sampling frames for your research. If your research is not about CMU, who would be another potential client?
D. What research has already been done on your or related topics? What could be learned from survey results? Each group member should locate and review 1 relevant item of research (e.g., article, report, book, etc.). For each item, provide:

- Full author name(s), date, title, where it appeared (book title and publisher, if it appeared in a book; magazine title, date, page numbers, if it appeared in a magazine; website title and web address if it appeared online, etc.)
- A sentence or two summarizing the item and what its connection is to the survey you are proposing.
- The name of the team member who found this item.

There is no restriction on what kind of surveys you propose, except that they should both be interesting and doable by your team, in this semester.

I.2. Target Population, Frame, Mode of Data Collection (Th Feb 4*)
(See Also: Separate Assignment on Team Working Agreement)
For each of the two topics you proposed, each team should add the following sections to their proposal, making it 3–5 pages in all:

E. What is the target population? To what population(s) do you wish to make inferences? What are the observation units?

F. What is the sampling frame? What are the sampling units?
- How does the target population differ from the sampling frame population, for your survey?
- What possible non-sampling errors could arise in the survey that you plan to conduct?
- Explain possible errors, how they could occur, and how you might tackle them.

G. What is the mode of data collection? How do you plan to carry out the survey (e.g., e-mail, in person interviews, etc) and why?

H. What variables do you propose to measure?

I.3. Choose Topic & Write Final Proposal, Begin IRB (Th Feb 11*)
(See also: Peer Evaluation Assignment)
I. On the basis of feedback to your submission for Parts I and II, choose a final survey topic, and update or revise your answers to (A) through (H) above. Submit the revised proposal.

If your team’s project involves human subjects/respondents, attach the following to the final, revised proposal:

J. Fill out the IRB form (available on the course webpage). Submit to me, not CM’s IRB.

K. How do you plan to protect the privacy and assure the confidentiality of respondents? Talk about data collection, protection, and disclosure.

II.4. Sampling Scheme & Question Design (Th Feb 18)

L. Decide on a sampling scheme (e.g., SRS, Stratified random sample, etc.) and explain why you chose it.

M. Write a questionnaire with 10–30 questions. Up to approximately 1/3 of these can be background or demographic questions and the rest should be directly related to the research questions you will try to answer with your survey. NOTE: If your survey involves observations instead of asking people questions, then instead you should carefully describe your observation protocol. That is, list 10–30 things you will always look for when observing each unit in your survey.
N. Give some idea of the sample size you will require and how you arrived at this number (talk about the margin of error for inferences you want to make).

II.5. Pretest & Revise Questions (Th Feb 25)

O. Pretest of a revised version of your questionnaire (or observation protocol) on a group of possible respondents/units.

P. Report on the specification of and results from the pretest, and any redesign of the questionnaire (or observation protocol) that may be required.

II.6. Final IRB & Project Plan (Th Mar 3*)

Q. Submit a final revised version of (I) through (M) to go to the University IRB. Again, submit to me, not CM’s IRB.

R. Develop and report on your schedule for implementing the survey, including plans for nonresponse followup, data analysis, and preparation of a final report.

Once this final version of the survey plan is approved you will be able to begin implementation.