S-030 Best Practices: Tips for Students Enrolled in S-030, From Former Students

Deciding to Take the Course

If you have not yet chosen your courses for the spring semester, keep in mind that this is one of the more work-intensive classes at HGSE. It's also a fantastic class that we highly recommend (just read the enthusiastic evaluations for previous years!), but keep this in mind when making choices about your spring course load.

- This is a class in which *you "do" instead of "read"* in other words, you won't be curling up in the evenings with your statistics textbook in your lap!
- In a typical week, you can expect to *spend time outside of class* doing the following: meeting with your study group, going to TF office hours, reviewing lecture videos, rereading lecture notes, watching the online SAS tutorials and working on a homework assignment. Depending on when an assignment is due, these activities could take anywhere from 5 to 20+ hours.
- The *pacing of the course* is tied to the six homework assignments and the final project. In general, you will have approximately ten days to work on an assignment, with 2-4 days of "downtime" between assignments. Although students will have varying work paces, it is unlikely that an assignment will take fewer than 15 hours to complete.

Class Preparation

Judy uses the class website extensively; make sure you check it regularly. Here are some other ideas we've found helpful in preparing for class:

- Make sure that you leave enough time before lecture to print out (or at least download, if you
 decide to take notes on your computer) the slides. It's safest to have your slides printed and
 ready to go the night before lecture. This is especially the case for early on in the semester, when
 you'll have to figure out whether your computer/printer can better handle PowerPoint slides or
 PDF pages.
- You can format the lecture slides to print in a variety of ways, e.g. 2 slides to a page, landscape, color, grayscale, etc. We encourage you to find the format that works best for your style of learning and taking notes. (Keep in mind that Judy does use color on the slides in a substantive way e.g., a green background indicates SAS programming or output so it might be worth the extra effort and cost to print in color, but that's up to you!)
- Find an *organizational system* that works for you. You'll be printing out a lot of slides (unless you choose to take notes on your computer), taking a lot of notes, and writing multiple assignments during the course of the semester. Different people will develop different organizational systems, and that's okay. Just make sure that you *have* a system!

Lecture

Lecture is just the beginning of your learning experience. Don't expect to understand a particular concept completely after its initial presentation in lecture. You'll attain a deep understanding of the course concepts only by engaging actively with them. This may involve any or all of the following: watching the lecture videos, participating in study groups, working on assignments, reviewing assignment feedback, re-reading lecture notes, and attending TF office hours.

• Class starts promptly at ten minutes past the hour every Tuesday and Thursday. We advise you to arrive a few minutes early so that you have time to find the seat you want, take out your notes, and get yourself into the "statistical zone." At least Judy makes it pleasant by playing music;-)

- Don't panic if you miss an important point during lecture or if something that is said confuses you. Whenever this happens, *make a note of the time* directly on your slide so that you can easily and quickly cue the lecture video to the appropriate spot. We suggest reviewing the lecture video as soon after lecture as you can so that your confusion/question is fresh in your mind.
- Sometimes during lecture it may feel as if Judy is speaking another language she IS!! You are learning *statistical language* as well as statistical concepts. To facilitate this learning, we suggest that you pay careful attention to the words Judy uses and the contexts in which she uses them. It may be worthwhile to keep track of key phrases and words on your slides during lecture (not only words you don't know but also words you think you know, but have precise statistical meanings). You and the members of your study group could then compile these words and phrases into a glossary of statistical terms over the course of the semester.

Study Groups

One of the best ways to further your thinking and understanding of statistical concepts is to talk through and discuss issues and question with people who are grappling with similar things. Not everyone will form a study group, but most students do choose to.

- Find a study partner or group you probably *do not want to get more than 5 people in one group*, for the sake of everyone being able to talk through their understandings.
- Find a *consistent*, *common meeting time* (another reason not to have too large a group).
- 1 to 2 hours is a good chunk of time to meet any less and you may not get to everything you want to get to, any more and your brain will start to get mushy (which is to say, you will start to have difficulty concentrating ©).
- Study groups are ideal for reviewing concepts introduced in class, as well as discussing the programming and content of homework assignments. For each meeting, decide what the meeting will be about beforehand. *Have an agenda* at least in your heads!
- You will get more out of your study group if you come to those meetings *prepared and with specific questions*. Agree ahead of time on what you will each individually do to prepare for your study group meeting (e.g., tackle the homework assignment or review class slides on your own).
- Do be careful of *plagiarism* issues writing the assignments together is not permitted (see more about this on the syllabus).

Videos of Class Lectures

Watch the class videos to augment your learning (not to replace actually going to class!). Judy packs a lot into every class session - there will be days when you leave class feeling like you missed something important, and there may be days when you leave feeling generally confused. This is okay - just be sure to do something about your confusion. It is incredibly helpful and informative to watch the class videos to further your understanding.

- If you followed the practice mentioned above regarding *jotting down the time* when you missed something in lecture, you can go specifically to that part of the lecture when watching the video of the class to get the information you need.
- If it's a general concept or a whole class that you want further clarification on, it can be helpful to watch the PM video if you attend the AM sessions, and vice versa. While the content of the course is the same in both sessions, sometimes the very slight differences in wording that Judy uses to explain these concepts can shed new light on your understanding.

Assignments

The completion of homework assignments is a key way to deepen and apply your learning.

- Start assignments as early as possible and plan enough time to work on multiple stages and drafts (programming, making sense of output, interpretation, writing, and editing). Don't expect to write up your assignment the night before it's due—there's no way you'll be able to do it.
- The *appendices* from lecture slides have the specific PC-SAS code applicable to those concepts, and you can find the full *code for the examples* used in class on the website. Take a look at the code and then watch the accompanying online tutorial that walks you through it, explaining what's happening step-by-step. Make an effort to understand the SAS code as part of your review of class, so you will know how they apply to the assignment.
- Printing from PC-SAS is free in the computer lab if you select the PC-SAS printer (up to 500 pages). You can also print two pages of output on a single page to limit the quantity of pages you print out.
- Go through *feedback on assignments* right away and clarify anything you are still unsure of by talking with the TF who graded your work. Revisit these issues when working on subsequent assignments, as there may be feedback on language and concepts that will inform your work.
- Start the final assignment as soon as possible. Judy will post it in the middle of the semester. Even though all the concepts you need will not yet have been covered in class, by the time she posts it, you'll be able to get started, using the previous homework assignments as a guide. To prevent a crunch at the end of the semester, begin strategizing and working on the final when it is posted.

TF Hours

TFs can be invaluable aids to your learning in this class. Take advantage of them!

- Join forces with your study group members to get more time with TFs by signing up for the same number of slots as you have people in your group, then attend the entire time together.
- Come to TF hours prepared with questions. Strategize ahead of time to prioritize your questions given the limited available time.
- Please be respectful of the TFs and your fellow classmates by *showing up when you have signed up* for office hours (or cancel them with sufficient notice).