Lab Reports and Class Procedure

Our normal lab procedure will consist of the following:
[1] When you walk into the lab room (MA 306) you will find the attendance book (which you need to sign, since this is part of your grade) along with graded lab reports (written in WORD) which you may pick up. Then you may drop off the current lab report (WORD), which you are submitting this current week for grading.

[2] Next, you choose a computer, bring up the class web site, and download the current lab for the week, along with any associated data files (usually **`.csv`**, **`.dat`**, or **`.txt`** files) to your desktop. Because of the peculiar way Microsoft runs their EXCEL files, when you download any **`.csv`** files to your desktop, the computer will automatically save them as a **`.xls`** file (the usual EXCEL way of saving files). You will probably need to go into the file on your desktop, and resave it as a **`.csv`** (comma delimited file) again, before it can be used in any of our software (like StatCrunch or R). I will give you assistance if you run into trouble doing this. EXCEL asks you multiple times if you are *SURE* you want to save it as a **`.csv`**, and it gets rather annoying, but I don't know how to fix that short of destroying the computer!

[3] Then, you open up the lab for the day, concurrent with opening up a WORD document, and work through the assignment. Feel free to ask for help, if you are having trouble or confusion, from either me and/or the person sitting next to you. Also, be sure you have your flash drive plugged into the computer. So, before the end of the lab period you can save all files to your flash drive before leaving the room. Be sure to put your name tag somehow on your flash drive, so that, if you leave it plugged into the computer when you leave, I, or some other student, can turn it into the math office for you to retrieve later.

The labs are set up to be (sort of) self-explanatory. So, if things go right, you can just follow along in the lab and produce results on your WORD document. You may print in the lab, and feel free to do so, for free. Please don't abuse this feature by downloading all of your email or half of the internet on paper, however, so that you don't ruin this privilege of free paper printing for the rest of us.

Usually, you won't finish the lab during the lab period. I try to design labs so you need to spend an additional hour on top of lab hour to complete the WORD submittal. Let me know if I am making them too long or too short, since this is an "ever adjusting art", it seems, so I need your feedback.

As stated before, lab reports are written in WORD, and are submitted at the beginning of the next lab period for grading. In an emergency (not as a regular routine) you may email me your lab report rather than drop it off in class, as long as you send it as a **`.doc`** document (the old version of WORD, before Windows

7) rather than as a **.docx** . I cannot read the newer version of WORD, so save it in the older version when you are ready to email it to me. Another way to send it to me in email is to make an Adobe **.pdf** document out of it—I can read that, fine. At the top of the first page, make sure your name and section number (either #1 or #2) is typed, along with which lab number you are doing. I usually number questions I ask for on the labs, so please note these numbers when answering the questions, so I can follow more easily when I grade. Be sure that you answer all questions with complete sentences and correct spelling/punctuation/grammar. Part of what we teach in Statistics class is how to professionally communicate your technical thoughts in writing, since in the real world frequently you will be writing statistical papers in order to obtain grants or money—and, therefore, you need to "look your professional best". There is an old saying among statisticians: "How you say what you say is almost as important as what you say."

When you submit your labs, feel free to double space, single space, space-and-a-half, or whatever suits your writing "personality". Also, feel free to print one side or both sides, however you prefer. Be sure to staple your sheets when you submit the report, however, so that I don't lose sheets. A stapler will usually be available in lab to staple pages. NEVER do a page break in the middle of a graph or a table, because that destroys the continuity of the information you are trying to present. Use the "handles" and resize graphs or tables, or reformat your page, in order to avoid page breaking in the middle of statistical presentations. Don't make graphs and tables too big or too small—practice is how you will know what is "just right". Because I am getting old and my eyes are not what they used to be, please use a 12 point font, not 10 point. My bad vision thanks you for the courtesy!

We will not accept labs turned in later than the lab day they are due. Because I know you lead busy lives and emergencies crop up during the semester, I will drop the lowest 2 lab scores, and count total amount of attendance minus 2 for grades. So, you can skip 2 lab days and miss 2 lab reports (not necessarily on the same day) without having your grade suffer. Any misses over 2, however, will result in a 0 for that score.

If you need to use the computer for your STAT 451 or 457 work during the semester at times other than our lab hour or day, you may use the computer lab in MA 206, immediately below our MA 306 lab room. Also, if we need to use a computer to help you during my office hours, we can see if MA 306 is available and, if not, use MA 206. You may not need to use our Mathematics Department computers, or even any on-campus computers, since we will be using StatCrunch and R, both of which can be accessed on your home computer (assuming you have downloaded R from the CRAN web site and installed it on your computer).

Finally, our general plan this semester is to start you out on the MyMathLab statistical package called StatCrunch (a rather stark name, don't you think?) for about 2 weeks, then swing into R. We will soon post documents explaining how to load R onto your home computers (it is a free and very powerful statistical software), along with many tutorial documents on how to use R. Brian tells me that most everything we do this semester can be done in StatCrunch, but next semester (STAT 452) you will be expected to be competent in R, starting from the first day of class. Also, most departments around campus are starting to see the value of R, and are pushing their grad students and undergrads to become familiar with R. I have seen students really "take to R", once they got the feel for the architecture of it.

During lab, I will (hopefully) be available to walk around and help you with any specific problems you are encountering in the lab of the day. I usually start out the class period with a 5 or (at most) 10 minute introduction on labs I graded or other issues, and then the rest of the period you may have to work on your lab homework. Feel free to utilize your neighbor when doing the work, as well as me for advice—just make sure that each person turns in his/her own WORD report. We don't want multiple copies of the same report with different names at the top of the report, as this defeats the purpose of learning in the lab. Let me know if you have constructive suggestions for making the lab more relevant for your STAT 451 needs.