California Polytechnic State University, San Luis Obispo
Fall 2011

STAT 330/530: Statistical Computing I - SAS

STAT 330/530-70: TR 4:10-6:00, Room 2-206

Instructor: Dr. Ulric Lund
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Office Hours:

Monday	Tuesday	Wednesday	Thursday	Friday	*And also by appointment!*
11:30-12:30	11:30-12:30	10:30-12:30	None	12:30-1:30	*Make one! Get help!*

Text: *The Little SAS Book, A Primer, Fourth Edition*, by Delwiche and Slaughter

Course Description and Grading:

This course introduces the powerful statistical software/data management tool called SAS. You will learn the basic syntax of the SAS programming language, learn how to read data into the SAS system, manipulate the data, and employ commonly used SAS procedures to obtain descriptive statistics and perform elementary statistical analyses. You will learn the basics of the SAS macro language, and learn how to export your SAS results into other computer software applications, e.g. Microsoft Excel.

Each class will begin with a very brief reading quiz, the purpose of which is only to motivate you to read the section(s) I have assigned for the day. Thereafter, I will take any questions about the reading you may have. When the reading assignment is clear to all, we will continue with an in-class exercise that puts our day's material to use. I suggest that you bring a USB flash drive to class each day so you can save the SAS code that you write for our in-class exercises.

Homework problems will be assigned each day of class. One entire week's homework exercises will be due together the following Tuesday at 4 PM before the beginning of class (see the Homework Protocol section on the back of this page). Late homework will not be accepted. To do well in the class, it is imperative that you do the homework as it is assigned. Do not wait until Monday evening to start the assignments!

We will have 1 in-class exam and a comprehensive 3-hour final exam. All exams will be open book and open notes. You may not use digital/online versions of the notes, only paper hard copies that you bring in yourself to the exam. Make-up exams will not be administered, so please make a note of the following dates:

Mid-Term Exam: Thursday, October 20
Final Exam: Thursday, December 8, 7:10-10:00 PM

Final letter grades will be assigned according to the following weight distribution:

Quizzes: 10%
Homework: 55%
Mid-Term: 15%
Final: 20%

Academic Dishonesty:

If you cheat on an exam or copy someone else's homework, you will fail my class. As per University policy, if you are caught cheating on either an exam or a homework assignment your name will be forwarded to the Office of Student Rights & Responsibilities to permanently document your misconduct. Copying answers and willfully providing answers are both forms of academic dishonesty, and will be prosecuted equally.

Homework Protocol: (Read through this fully and carefully before submitting your homework assignments)

1. You need to turn in both a hardcopy version and a digital/electronic version of your homework assignments by 4PM on Tuesdays, unless stated otherwise in class.

2. The hardcopy must be turned in by 4PM to my office, or at the beginning of class on Tuesday. The hardcopy should contain only your computer code. I do not need your output because I will be rerunning your programs. I will use the hardcopy of the computer code to provide you with feedback about your programming and to be able to return a graded paper to you.

3. The electronic file containing your computer code must begin with a header of comments providing your name and homework assignment number. Use the following header format for all of your homework assignments:

```
/***********************************************/
/* Name: Ulric Lund                            */
/* Homework 1                                  */
/***********************************************/
```

4. The digital version of your computer code should be emailed to me also by 4PM on Tuesdays. **To this end, use the following steps <u>exactly</u> to turn in your code after you have completed the week's assignments.**

    a. Save all of the SAS code for one week's assignments to a single ***.sas*** file with filename format ***HW1LundU.sas***.
    b. Send me an email with this one file as an attachment.
    c. Use the following format for a subject line in your email to me (copy this into your email subject line, so it is certain to be correct): ***STAT 330 HW 1: LundU***.
    d. This will ensure that your email is forwarded to an appropriate email folder by my email program's filter.

5. Failure to conform to the exact specifications given in (3) and (4) above will result in a 5% point loss in your homework score for each failed attempt.

6. Late homework will not be accepted.

7. I do not encourage you to confer with your fellow students on our homework problems. Everyone is responsible for writing his/her own code. Copying someone else's code for a homework assignment is tantamount to plagiarism, and will be prosecuted as academic dishonesty. I suggest that you keep conversations about homework to a minimum, so as not to arrive at too similar code as one of your colleagues. I would prefer you come to me or email me if you have problems with your homework.

8. Give yourself plenty of time for doing the homework. Writing computer programs is an iterative, time-consuming process. Also, use the homework exercises to get comfortable with the SAS help system. This is a very important resource for your future SAS programming. I will purposefully give you homework assignments that will contain elements outside of the material covered in class to give you the opportunity to learn how to learn SAS. SAS is big! We cannot cover everything. You need to learn how to solve your own computing issues. This class will consume a lot of your study time. It will frustrate you. It may make you cry. But the satisfaction when finally arriving at a working SAS program will also fill your heart with joy. Have fun!

Classroom Civility / Common Courtesy: Engaging in the following activities during class is extremely rude to an instructor. Please refrain from these activities. If you cannot refrain from these activities, I will ask you to leave the class.

- <u>Cell phones</u>: Turn yours off and put it in your backpack when you come to class.
- <u>Sleeping in class</u>: If you are too tired to be engaged in class, please go get some rest, but somewhere else.
- <u>Reading newspapers in class</u>: If you would like to catch up on current events, then do so on a bench outside, perhaps under a nice tree.
- <u>Doing other course assignments in class</u>: If you are behind in another class' homework, then go to the library and do your homework there if you must.

Access to SAS:

1. Cal Poly has SAS 9.2 installed in several computer labs: PC Labs in Kennedy Library, Business Lab (3-300), Statistics Department Statlab, Studio Classroom (Open Hours TBA).

2. You may borrow a set of DVD's from me to install SAS on your own computer. I am not responsible for proper installation of SAS on your home computer. Having a problem running SAS at home is not an acceptable excuse for late homework.

3. SAS Online Documentation is available on the internet: http://support.sas.com/documentation/cdl_main/index.html