

University of Florida
College of Public Health & Health Professions Syllabus
Spring 2015 PHC 6080: SAS for Public Health – Data (1 credit)
Section 1F99 – HPNP G111 – Tuesday 7th period (1:55-2:45)
Delivery Format: Blended Learning Model
Course Specific Content and Assessments in E-Learning using CANVAS: <https://lss.at.ufl.edu/>
Open Course Materials: <http://bolt.mph.ufl.edu/software/sas/>

Starting the Course: Read this syllabus. Review the E-Learning home page and weekly schedule. Additional guidance for getting started is provided in the E-learning site in CANVAS.



As an instructor, my primary goal is for each of you to learn as much as possible during the semester!



Instructor Name: Dr. Amy Cantrell (<http://users.php.ufl.edu/acantrell/>)
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Office Hours: by appointment

Preferred Course Communications:

- Ask about issues of a personal nature by email through E-Learning
- Ask anything (except personal questions) on the discussion board
- Ask or Comment Anonymously through [Qualtrix Survey](#) (Password: spring.2015)

Note: In the E-Learning system a cut-off time of 10:00pm means that at 10:00:01pm you are late. Computers are very literal and do not recognize seconds after a given time as “on time.” Please plan your work accordingly and do not wait until this cut-off time to complete your assignments in the system.

Prerequisite: PHC 6052: Introduction to Biostatistical Methods. Students must have prior experience with basic data entry and analysis in SAS. All students must have access to a laptop with SAS 9.3 or higher installed for in class use. See <http://software.ufl.edu/agreements/sas/student/> for SAS program purchase information and online documents. Computing requirements can be found at <http://mph.ufl.edu/students/computer-requirements/>.

PURPOSE AND OUTCOME

Course Overview: This is a one credit course which covers using SAS to process public health data. Students will learn how to input, store, and modify data using SAS.

Relation to Program Outcomes: This one-credit course is a required concentration core course for MPH Biostatistics students and covers the following competencies.

- Describe the role of biostatistics in public health research.
- Use appropriate statistical methodology to address public health problems.
- Develop presentations based on statistical methods and analyses for both public health professionals and educated lay audiences.
- Apply software to conduct statistical analyses.

Course Objectives and/or Goals: Upon completion of PHC 6080, students will be able to

1. Use SAS to input store modify, and export data.
2. Create SAS macros to solve complex problems.
3. Utilize a variety of resources for investigating SAS data processing skills.
4. Solve problems with SAS programs independently.
5. Plan, implement, and present results for data management tasks using SAS.

Instructional Methods: This course is presented using a blended learning model. Students will review videos and readings outside of class. There will also be some formal in-class lectures. During class sessions, students will have the opportunity to ask questions of the instructor and work with each other to create solutions to assignments. Students can also receive feedback and assistance via the course discussion board or email in E-Learning. In this course, you will need to take responsibility for your own learning and request assistance from the instructor and other students as needed. The instructor can also provide advice and answer questions related to how each student can effectively and efficiently utilize the resources provided to their best advantage.

DESCRIPTION OF COURSE CONTENT, COURSE MATERIALS, AND TECHNOLOGY

Topical Outline/Course Schedule (6080)

Week	Class Meeting	Assignments Due (Wednesday 10 PM)	Specific In-Class Activity (All extra time will be used to work on course portfolio and presentation)	Video or Reading Assigned for Discussion Board Post Due Sunday by 10 PM
1	1/06		Orientation and First Day Program	UCLA Movies – Macros (2 parts)
2	1/13	Dataset Documentation	Simple Macros and Basic Analysis	LSB Chapter 2
3	1/20		Getting Data into SAS	UCLA Movie – Entering Data
4	1/27		Using ODS	LSB Chapter 3
5	2/3		Advanced Macros	UCLA Movie – Modifying Data
6	2/10		Data Cleaning	LSB Sections 4.1-4.12, 4.24
7	2/17		Advanced Macros	UCLA Movies – Managing Data and Arrays Part 1
8	2/24	Portfolio Draft	Finish Portfolio Draft	UCLA Movies – Arrays (Parts 2-4)
9	3/3	No Class - Spring Break		
10	3/10		Work on Portfolio and Presentation	LSB Chapter 6
11	3/17		Work on Portfolio and Presentation	LSB Chapter 10
12	3/24	Complete Drafts of Portfolio and Presentation	Finish Portfolio and Presentation	
13	3/31		Deliver Presentations	
14	4/7		Deliver Presentations	
15	4/14		Deliver Presentations	
16	4/21		Deliver Presentations	
Finals Week	4/28	Final Revisions to Portfolio or Presentation		

Topics PHC 6080: Specific topics covered in the course are listed below. Lectures and discussions are designed to introduce a single topic or group of related topics.

- Importing data into SAS by hand
- Importing data using the input wizard
- Importing data using INFILE statement
- Using INFORMATS when importing data
- Using datasets which are already in SAS format
- Using SAS libraries
- Using PROC CONTENTS
- Using PROC PRINT and other procedures to check datasets
- Cleaning raw datasets
- Labeling and formatting variables
- Creating new datasets
- Using ARRAYS in SAS
- Utilizing IF, IF-THEN, DO, WHILE, RETAIN, SUM, etc.
- Creating new variables (simple to complex situations)
- Using SAS functions (simple to complex situations)
- Merge data
- Subset data
- Using SAS Macros
- Writing SAS Macros
- Transposing datasets
- Exporting data to multiple formats
- Creating new datasets using ODS output
- Other topics when possible/necessary

Course Materials: The Little SAS Book: A Primer 5th ed., by Lora Delwiche and Susan Slaughter. This textbook is available online through the UF libraries (<http://library.books24x7.com/toc.aspx?bookid=50231>).

Videos: There are numerous videos assigned for this course. It is extremely important to review this content as this will be the primary form of instruction on the course concepts. Some videos presented in the course materials are stored in YouTube. If the text in the video is too blurry, try increasing the quality of the YouTube video using the small gear icon which appears at the bottom of the video when it is playing. If you want to view the video faster or slower, you can adjust the speed using the gear icon. Many videos have closed captions and/or transcripts available.

E-Learning: An E-Learning site will be available for the course using CANVAS. The Weekly Schedule and all course materials are available online through this site including grades, assignments, discussion boards, and other course information. E-learning is accessible at lss.at.ufl.edu or through my.ufl.edu. You must have a valid Gatorlink ID and password. For assistance, call the UF Help Desk at 392-HELP.

For technical difficulties with E-learning please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Browser Recommendations: <https://wiki.helpdesk.ufl.edu/FAQs/SupportedBrowsersForUFWebsites#elearning>

Technology: A computer for in class use running SAS 9.3 or higher.

Non-SAS Technical Help: On the sign-in site for E-Learning, <http://lss.at.ufl.edu>, there are multiple tutorials and help to aid students in navigating through the system. There is a link to Student Help in our course site. Please familiarize yourself with the information in each of these help tools. If you need help logging onto E-Learning, password issues, etc., please contact the UF Help Desk at 352-392-HELP(4357) or helpdesk@ufl.edu. If you need (non-SAS related) technical help in the course, please post your questions on the discussion board. You may find the answer to your issue from other student postings. This can often be the quickest way to get help.

Response Time: If I can, I will address your questions immediately. During the week I will do my best to address all questions completely within 24 hours. Generally I will respond to questions as soon as possible each morning Monday-Thursday. I have class on Monday, Tuesday, and Wednesday afternoons during which I will be unavailable. For questions asked on Friday, Saturday, or Sunday, I may not be able to respond until early the following week.

Announcements: Class Announcements will be sent via CANVAS. You are responsible for all information in these announcements. As a student of the University of Florida, it is very important to check your UFL email address regularly. In this class, you should check this account at least once every few days. An easy way to access your account is at <https://webmail.ufl.edu/>.

Discussion Boards: Reviewing the discussion posts of other students and asking your own can be very helpful.

ACADEMIC REQUIREMENTS AND GRADING

Assignments (see assignment documents for details)

- **Portfolio:** Each student will prepare a portfolio containing self-created SAS coding examples
 - **Draft:** Consists of a draft of at least 2/3 of the final portfolio
 - **Final:** Final version of complete portfolio
- **Presentation:** At the end of the semester, each student will prepare and deliver a presentation containing a summary of certain components of their portfolio. Students must provide a complete draft of their presentation by the deadline but will be allowed to revise their submission based upon comments provided during their presentation and based upon ideas generated from other student presentations.
- **Discussion Board Posts for Assigned Readings and Videos:** For each chapter and each video assigned you will submit a discussion board post in the appropriate topic **explaining the two most interesting or useful facts that you learned from that assignment.** Posts must provide details and discussion not simply a short sentence. Providing example code, output, etc. is highly encouraged.
 - **Bad Example:** (1) I found PROC CONTENTS interesting and (2) I learned how to format variables in SAS.
 - **Outline of a Good Example:** (1) When using PROC CONTENTS, there are numerous options that I found useful (go on to explain and give code, etc.) ... (2) Formatting variables is extremely helpful in SAS since it allows flexibility in the way SAS stores the data and how it displays it to the user in the results of analyses (again, go on to give an example and/or more detailed explanation).

Reading/Video Assignments: The assigned readings and videos should be completed during the week assigned in the schedule. Be certain to provide your post (described above) by the due date each week. Any questions you have regarding the material presented should be clarified by asking your question in class or posting your question on the course discussion board. You should investigate the code presented on your own by trying it yourself. **YOU ARE RESPONSIBLE FOR ALL MATERIAL IN THESE ASSIGNMENTS.**

Attendance: Attendance will be taken during each class session. Students who are on-time to class will receive 3 points; students who are less than 10 minutes late will receive 2 points; and students who are more than 10 minutes late will receive 1 point. Students who are not in attendance will receive 0 points.

Grading

Requirement	Due date	% of final grade
Draft Portfolio	February 25 th	10%
Final Portfolio	Completed Draft: March 25 th by 10 PM Final Revisions: April 29 th by 10 PM	40%
Final Presentation	Completed Draft: March 25 th by 10 PM Final Revisions: April 29 th by 10 PM	20%
Discussion Posts (x 10 2% each)	Sunday by 10 PM Weeks 1-8, 10, 11	20% (2% each)
Attendance	-----	10%

oint system used (i.e., how do final course averages translate into letter grades).

Final Average	94-100	90-93	85-89	80-84	77-79	74-76	70-73	67-69	64-66	60-63	57-59	Below 57
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Please be aware that a C- is not an acceptable grade for graduate students. A grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: <http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Policy Related to Make up Exams or Other Work: Students are allowed to make up work ONLY as the result of illness or other unanticipated circumstances warranting a medical excuse and resulting in the student missing an assignment deadline, consistent with College policy. Documentation from a health care provider is required. Work missed for any other reason will receive a grade of zero. Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance: Class attendance is mandatory. Excused absences follow the criteria of the UF Graduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays), and should be communicated to the instructor prior to the missed class day when possible. UF rules require attendance during the first two course sessions. Regardless of attendance, students are responsible for all material presented in class and meeting the scheduled due dates for class assignments. Finally, students should read the assigned readings prior to the class meetings, and be prepared to discuss the material.

Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details: http://www.registrar.ufl.edu/catalogarchive/01-02-catalog/academic_regulations/academic_regulations_013_.htm

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Communication Guidelines: Questions about course material should be posted on course discussion boards in E-Learning. Questions or issues of a personal nature should be sent by email through E-Learning. Please review the Netiquette Guidelines: <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>.

Online Faculty Course Evaluation Process: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. I value your comments and honest review of this course and consistently work to improve the course based upon the results of these evaluations and other methods of feedback. Course evaluations are also an important part of the faculty promotion process. Evaluations are typically open during the last two or three weeks of the semester, but you will be notified of specific times when the evaluations are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

Academic Integrity: Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

- <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>
- <http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

ADVICE FROM DR. CANTRELL

As you will hear me say numerous times, all I can ask is that you do the best you can with the materials that are made available to you and ask when you need more direction or explanation.

It is expected that you will spend approximately 2-4 hours per week on this course outside of class. Scheduling your time wisely and working efficiently will minimize the need for extra work in this course.

Generally I advise students to break this time up into blocks of 1-2 hours split over a few days of the week given your schedule. Working on too much material in one sitting is more likely to cause frustration and does not allow for time for understanding to develop or for questions to be answered. Learn to use the materials to your greatest advantage.

If you go through the content as directed, you will learn the skills you need to succeed in the course as well as build a foundation of SAS skills.

Read the assigned materials and watch the videos provided carefully. Work along with tutorials and readings, testing your understanding of the code presented. Do not allow yourself to waste time working in the software, if you are having issues, let us know immediately and we will help as soon as possible. Try to make sure as much of your time as possible in the software is productive.

Whenever possible, many students find it helpful to have the videos playing in one window, monitor, or other device while working in the software in another, pausing as needed to work through the process on your own.

Be sure to ask when you don't understand and work hard to stay on-track with the material. Getting behind can be difficult to fix in any course. Let the instructor know as soon as possible if you feel you are falling behind.

SUPPORT SERVICES

Accommodations for Students with Disabilities: If you require classroom accommodation because of a disability, you must register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class. The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health: Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- Crisis intervention is always available 24/7 from:
Alachua County Crisis Center: (352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.
