Instructor Information:
Amy Cantrell, PhD
Clinical Assistant Professor
UF Department of Biostatistics
Office Hours: by appointment
Email: via E-learning for course related emails
Phone: 352-294-5927
Office: CTRB 5213
Web: http://users.phhp.ufl.edu/acantrell/

Prerequisites: 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 9.2 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/.


E-Learning: An E-Learning site in Sakai will be available for the course. Grades, discussion boards, and possibly other information will be available in the E-Learning system. 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

Class Sessions: Each session will be designed to do one or more of the following
- Instruct students on concepts regarding working with and analyzing data in SAS. This usually involves discussing example SAS code and output.
- Discuss SAS concepts among the members of the class as a whole or in groups.
- Allow students time to practice SAS programming for assignments or presentations.
- Student Presentations to the class

Course Requirements/Evaluation/Grading: Your grade in this course will be based on the following:
- (60%) Portfolio and Presentation (see assignment documents for details)
- (25%) Class participation assessment will include attendance/tardiness, preparation for class, and participation in discussions.
- (15%) Reading/Video Assignment Discussion: 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.

The grading scale for this course consists of the following scale, including minus grades. The conversion factors for grade point values assigned to each grade are also included (in parentheses):

- 94% - 100% = A (4.00)
- 90% - 93% = A- (3.67)
- 85% - 89% = B+ (3.33)
- 80% - 84% = B (3.00)
- 77% - 79% = B- (2.67)
- 74% - 76% = C+ (2.33)
- 70% - 73% = C (2.00)
- 67% - 69% = C- (1.67)
- 64% - 66% = D+ (1.33)
- 60% - 63% = D (1.00)
- 57% - 59% = D- (0.67)
- 5% - 56% = E (0.00)

For more detail on letter grades and university policies related to them, see the Registrar’s Grade Policy regulations at https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Last revised January 4, 2014
**Communication:**

- Questions about course material should be posted on the course discussion boards in E-Learning.
- Questions of a personal nature (grades, etc.) should be sent via email or discussed in person.
- **Note:** When emailing the instructor using the E-learning mail tool, **ALWAYS** check the box “send a copy to the recipients email.” This will result in the fastest possible response.

**Reading/Video Assignments:** The assigned readings and videos should be completed prior to class during the week assigned in the schedule. 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.**

**Class Participation Grading:**

- **Attendance (35% of Class Participation):** 0 = absent, 1-2 = late to class, 3 = present and on-time
- **Class Engagement (65% of Class Participation):**
  - Asking a question, answering a question, discussing a particular topic (either via the discussion boards or in-class) = 2 points each.
  - Presenting an example to the class (either in class or as a video) = 2-4 points, depending on degree of difficulty of the example.
  - Being clearly un-prepared for in-class work = 4 point deduction from class engagement total.
  - A maximum of 10 points each week can be earned – this is not to discourage you from continuing to be engaged but to prohibit your engagement from being crammed into a short period of time. Bonus points may occasionally be offered to students who continue to be engaged even though they have reached the maximum points for a given week.
  - Total points will be between 100 and 150 points depending upon the highest sum observed.

  - Each week (Due Thursday at 9 PM for the previous week from Tuesday to Monday), students will submit a report on their self-assessment of class engagement and attendance. The instructor will verify and provide a final grade.

**Policy Related to 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.

**Classroom etiquette:** Please come to class on time and be prepared to stay until the time scheduled as the end of class. Pagers and cell phones should not be used in class. Avoid “side” conversations. Please consider that your conversation may interrupt the attention of someone seated near you. Generally, you should be speaking to the class as a whole or participating in group discussions as directed by the instructor. I welcome in-class questions. Your question will nearly always be one that other students also have.

**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 a homework or project 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.

Last revised 1/4/2014 7:40:19 PM
**Course and Instructor Evaluation Process:** Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. These evaluations are conducted online at [https://evaluations.ufl.edu](https://evaluations.ufl.edu). Summary results of these assessments are available to students at [https://evaluations.ufl.edu/results/](https://evaluations.ufl.edu/results/).

**Statement of University’s Honesty Policy:** At the University of Florida, each student is bound by the academic honesty guidelines of the University and the student conduct code printed in the Student Guide and on the University website. The Honor Code states: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.” Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior. Students are expected to act in accordance with the University of Florida policy on academic integrity (see Student Conduct Code, the Graduate Student Handbook or this web site for more details: [http://www.dso.ufl.edu/sccr/](http://www.dso.ufl.edu/sccr/)).

**My personal expectations and comments regarding academic integrity:** Students will often be encouraged to discuss the material with other members of the class on homework and other assignments. I believe we learn best when individual learning and group cooperation are present. However, I expect that no student will ever do any of the following:

- Have another person complete any assignment in this course
- Copy another student’s work on any assignment in this course
- Use materials provided by a previous student in the course for any purpose. Do not seek to obtain or accept offers of such materials (delete any materials you obtained prior to the beginning of the course)

I want to stress that in this class, if you focus on learning the material and worry less about the grade you will receive, you will be rewarded with knowledge that will be much more useful to you in the future than the grade received in this class.

**Accommodations for Students with Disabilities:** If you require classroom accommodation because of a disability, you must first register with the Dean of Students Office ([http://www.dso.ufl.edu/](http://www.dso.ufl.edu/)). 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 may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575 or visit their web site for more information: [http://www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/).

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, including primary care, women’s health care, immunizations, mental health care, and pharmacy 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: [http://shcc.ufl.edu/](http://shcc.ufl.edu/)

Crisis intervention is always available 24/7 from Alachua County Crisis Center: (352) 264-6789.

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.
PHC 6080: SAS for Public Health - Data

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.

Course Objectives: Upon completion of this course, 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.

Topics: 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

Assignment Schedule: Adjustments to this schedule are possible during the semester. The instructor will strive to be informative and fair regarding any changes.

<table>
<thead>
<tr>
<th>Class</th>
<th>Assignments Due</th>
<th>Class</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/7</td>
<td>None</td>
<td>2/25</td>
<td>UCLA Movie – Managing Data</td>
</tr>
<tr>
<td>1/14</td>
<td>UCLA Movies – Macros</td>
<td>3/11</td>
<td>LSB Chapter 6; Draft 2</td>
</tr>
<tr>
<td>1/21*</td>
<td>LSB Chapter 2 (can skip 2.16-2.18)</td>
<td>3/18</td>
<td>LSB Chapter 9</td>
</tr>
<tr>
<td>1/28</td>
<td>UCLA Movie – Entering Data</td>
<td>3/25</td>
<td>UCLA Movies – Arrays (Multiple parts)</td>
</tr>
<tr>
<td>2/4</td>
<td>LSB Chapter 3; Draft 1</td>
<td>4/1*</td>
<td>None</td>
</tr>
<tr>
<td>2/11</td>
<td>UCLA Movie – Modifying Data</td>
<td>4/8</td>
<td>Final Portfolio and Presentation Due</td>
</tr>
<tr>
<td>2/18</td>
<td>LSB Sections 4.1-4.11</td>
<td>4/15 and 4/22</td>
<td>Student Presentations</td>
</tr>
</tbody>
</table>

*No Class on These Dates
PHC 6081: SAS for Public Health – Analysis

**Co requisite:** Students must be currently enrolled in or have already completed PHC 6080: SAS for Public Health - Data.

**Course Overview:** This is a one credit course which covers using SAS to analyze public health data. Students will learn how to use common SAS procedures to conduct common statistical analyses. Although we will discuss results, this course does NOT teach statistical methods.

**Course Objectives:** Upon completion of this course, students will be able to
1. Demonstrate how to use common SAS procedures to analyze public health data.
2. Use ODS techniques to control output.
3. Utilize a variety of resources for investigating SAS analysis procedures.
4. Solve problems with SAS programs independently.
5. Create SAS macros useful for analyzing data.
6. Plan and implement data analysis using SAS and present the results.

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

- **Specific Analysis Procedures**
  - UNIVARIATE, FREQ, MEANS
  - TTEST, POWER, NPAR1WAY
  - REG, CORR, GLM
  - LOGISTIC
  - SURVEYFREQ, SURVEYMEANS
  - SURVEYREG, SURVEYLOGISTIC
  - LIFETEST, LIFEREG, PHREG

- **Specific Graphics Procedures**
  - SGPLOT, SGPANEL
  - Use and write SAS Macros
  - Using ODS
    - Saving output to files
    - Using ODS select and exclude
    - Creating new datasets with ODS output
    - Working with ODS graphics

**Assignment Schedule:** Adjustments to this schedule are possible during the semester. The instructor will strive to be informative and fair regarding any changes.

<table>
<thead>
<tr>
<th>Class</th>
<th>Assignments Due</th>
<th>Class</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/7</td>
<td>None</td>
<td>2/25</td>
<td>UCLA Movie – General Information</td>
</tr>
<tr>
<td>1/14</td>
<td>LSB Chapter 1</td>
<td>3/11</td>
<td>LSB Chapter 8; Draft 2</td>
</tr>
<tr>
<td>1/21*</td>
<td>UCLA Movie – Exploring Data</td>
<td>3/18</td>
<td>LSB Chapter 10</td>
</tr>
<tr>
<td>1/28</td>
<td>LSB Sections 5.1-5.7</td>
<td>3/25</td>
<td>None</td>
</tr>
<tr>
<td>2/4</td>
<td>UCLA Movie – Analyzing Data; Draft 1</td>
<td>4/1*</td>
<td>None</td>
</tr>
<tr>
<td>2/11</td>
<td>UCLA Movie – Macros</td>
<td>4/8</td>
<td>Final Portfolio and Presentation Due</td>
</tr>
<tr>
<td>2/18</td>
<td>LSB Chapter 7</td>
<td>4/15 and 4/22</td>
<td>Student Presentations</td>
</tr>
</tbody>
</table>

*No Class on These Dates*