

**University of Florida**  
**College of Public Health & Health Professions Syllabus**  
**Course Number: HSA 6196: Healthcare Data Analytics II**  
Spring: 2017  
Delivery format: On-Campus

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Instructor Name: Kalyani Sonawane, PhD  
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Office Hours: By appointment, please contact instructor  
Preferred Course Communications: Email

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**Prerequisites: Completion of HSA 6395-Healthcare Data Analytics I**

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**PURPOSE AND OUTCOME**

HSA 6196 is designed to teach you the practical and analytical tools required in a health care environment. The course includes a combination of lectures, in-class problems, homework, and readings. The course is multi-disciplinary in nature and will include concepts from statistics, epidemiology, decision science, and business analytics. A specific emphasis will be placed on learning how to identify and analyze data to answer business and clinical questions in a healthcare setting.

**Technology (Required)**

Laptop with SPSS software

**Course Materials (Required)**

An Introduction to Medical Statistics (4<sup>th</sup> Edition) by Martin Bland  
Required readings (posted on canvas)

**Course Materials (Optional)**

Medical Statistics: A Guide to SPSS, Data analysis and Critical Appraisal (2nd Edition) by Belinda Barton and Jennifer Peat

**Instructional Methods**

Classroom sessions will be a mix of traditional lecturing and practice problems. For practice problems, you will need your laptop (with installed SPSS) with you in class. Readings will be posted to Canvas prior to each class session. For issues or technical difficulties with E-learning please contact the UF Help Desk at:

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

## DESCRIPTION OF COURSE CONTENT

### Topical Outline/Course Schedule

Date	Time	Topic	Due dates
1/4/2017	0:50	Introduction	
1/9/2017	1:55	Data manipulation and visualization + SPSS exercise 1	Exercise 1
1/11/2017	0:50	Review of methods from Data analytics I	
1/16/2017	1:55	<b>MLK Holiday</b>	
1/18/2017	0:50	SPSS exercise 2	Exercise 2
1/23/2017	1:55	Modelling continuous data	
1/25/2017	0:50	SPSS exercise 3	Exercise 3
2/30/2017	1:55	Modelling binary data	
2/1/2017	0:50	SPSS exercise 4	Exercise 4
2/6/2017	1:55	Modelling time-to-event data	
2/8/2017	0:50	SPSS exercise 5	Exercise 5
2/13/2017	1:55	Modelling count data	
2/15/2017	0:50	SPSS exercise 6	Exercise 6
2/20/2017	1:55	Case study I (Group project)	
2/22/2017	0:50	Case study I (Oral presentation)	
2/27/2017	1:55	<b>Exam 1</b>	
3/1/2017	0:50	<b>Exam review</b>	
3/6/2017	1:55	<b>Spring Break</b>	
3/10/2017	0:50	<b>Spring Break</b>	
3/13/2017	1:55	Reporting/Writing/Critique	
3/15/2017	0:50	In class exercise 7	Exercise 7
3/20/2017	1:55	Modelling costs	
3/22/2017	0:50	SPSS exercise 8	Exercise 8
3/27/2017	1:55	Decision analysis	
3/29/2017	0:50	SPSS exercise 9	Exercise 9
4/3/2017	1:55	Forecasting	
4/5/2017	0:50	SPSS exercise 10	Exercise 10
4/10/2017	1:55	Confounders/Subgroups/Uncertainties	
4/12/2017	0:50	SPSS exercise 11	Exercise 11
4/17/2017	1:55	Case study II (Group project)	
4/19/2017	0:50	Case study II (Written report)	
4/24/2017	1:55	<b>Exam 2</b>	

**NOTE: Schedule can change at the discretion of Lead Instructor**

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## ACADEMIC REQUIREMENTS AND GRADING

### Assignments

Policies Related to in-class SPSS exercise:

SPSS exercise must be completed individually.

One of the best ways to learn the quantitative tools, concepts, interpretations and analyses discussed in this course is through practice. Each SPSS assignment will contain problems that are based on material drawn from the lectures, readings, and other sources. For each assignment, you must turn in the following:

1. **An electronic copy** of your **answers** uploaded to the appropriate folder on the e-learning website Assignment section as a Word document.
2. **An electronic copy** of your **SPSS output** uploaded to the appropriate folder on the e-learning website Assignment section as a Word document.

**Late/Make-up assignments will not be accepted.**

### Policy Related to Required Class Attendance

Attendance is mandatory. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. It is your responsibility to inform the instructor about upcoming absences. Excessive absences may result in a lowering of your grade at the instructor's discretion.

Please note all faculties 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](http://www.registrar.ufl.edu/catalogarchive/01-02-catalog/academic_regulations/academic_regulations_013_.htm)

## Grading

Grades for this course will be determined according to student performance on the four requirements as shown in the table below. The same evaluation procedure will be applied to ALL students.

Requirement	% of final grad (must sum to 100%)
Class exercise	10%
Group Projects	30%
Exam 1	30%
Exam 2	30%

Point system used (i.e., how do course points translate into letter grades).

Points earned	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
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>

## Exam Policy

There will be two in class exams.

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## STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR FEEDBACK

### Expectations Regarding Course Behavior

#### Communication Guidelines

**Directions** – Proper directions will be communicated to you in class, through the homework assignments and in this syllabus. If you do not understand the expectation, ASK the instructor before you turn in the assignment. It is too late to seek clarification after grades have been assigned.

**Professionalism** –Please be punctual! No phone calls, text messages, e-mails, tweets, or any other new electronic communication method that may be invented between now and the end of the semester. **Laptops may be used in class for course-related work. Otherwise your computer should remain closed during classtimes.**

#### 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.

## Online Faculty Course Evaluation Process *optional in UF Template*

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu> so make sure you include a statement regarding the value and expectation for student participation in course evaluations. We suggest you include a comment regarding how you will use the evaluations (e.g. to make specific improvements to the course and teaching style, assignments, etc.). It is also important to make some statement regarding the direct influence they have on faculty tenure and promotion, so your input is valuable. 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. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

## 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 *optional in UF Template*

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that arise in the course of pursuing higher education or 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:

<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.