# Syllabus

SPHL 6050-80, 81, & 82FA 2021 BIOSTATISTICS FOR PUBLIC HEALTH DR. L. HO

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# BASIC COURSE INFORMATION PREFIX AND NUMBER **SPHL 6050 NAME** Biostatistics for Public Health **SECTION** 80, 81, 82 CREDIT ALLOTMENT 3 credit hours **SEMESTER** Fall 2021 **CAMPUS** Online **FORMAT** Virtualized Hybrid LIVE SESSIONS

All live sessions for SPHL 6050-80 are on Tuesdays from 6:30 PM – 9:20 PM North American Central Time.

All live sessions for SPHL 6050-81 are on Wednesdays from 6:30 PM – 9:20 PM North American Central Time.

All live sessions for SPHL 6050-82 are on Thursday from 6:30 PM – 9:20 PM North American Central Time.

View the Weekly Course Schedule for live session dates. Attendance is strongly encouraged, not required. There are no makeup opportunities for missing a live session. If you have extenuating circumstances (e.g., severe illness, accidents, or serious family problems), notify the instructor and teaching assistant by e-mail before the live session.

# STUDENT DEADLINES

All dates and times posted are for North American Central Time. It is your responsibility to know how that translates to your time zone and to submit assignments per these posted deadlines.

# **INSTRUCTOR & TEACHING ASSISTANT** INSTRUCTOR TEACHING ASSISTANT COMMUNICATIONS STRATEGY Please reach out to me b email if you have any questions, comments, or concerns. You must use your Tulane e-mail account or Canvas Inbox for all e-mail communications with your instructor and teaching assistant, and with faculty and staff,

Please reach out to me b email if you have any questions, comments, or concerns. You must use your Tulane e-mail account or Canvas Inbox for all e-mail communications with your instructor and teaching assistant, and with faculty and staff, for all Tulane-related matters. All instructor, School, and University correspondence will be sent to your Tulane e-mail. Please plan on checking your Tulane e-mail account regularly for course-related messages, even if your Tulane e-mail is forwarded.

**Important note:** While all the messages generated within Canvas will be automatically forwarded to your Tulane e-mail account, the mail you receive in your Tulane e-mail account (including mail from your SPHTM Online advisor, SPHTM Online director, SPHTM Online Classroom Support, SPHTM dean, etc.) will NOT be forwarded to your Canvas Inbox. In other words, please be sure to check your Tulane e-mail account regularly.

This course uses Canvas for the facilitation of communications between faculty and students, the housing of course materials, submission of assignments, and the posting of grades. You can access the course site by logging into <u>Canvas</u>. <u>Zoom</u>, a cloud-based video communications app, is used to deliver an immersive, live virtual classroom experience with real-time communications with your instructor and peers. Information on how to join live sessions will be available on <u>Canvas</u>.

# COURSE OVERVIEW

This course lays the foundation for evidence-based public health. The objective of the course is to introduce biostatistical methods and their underlying principles, as well as how to perform statistical analysis and appropriate interpretation of results. The course covers both graphical and numerical methods of managing, describing, and analyzing data, and computer assisted data analysis.

In general, the course is organized in a lab format in which students are encouraged to build their own analysis as the Instructor demonstrates step-by-step. Each analysis is prefaced with a brief discussion on the foundational theory that drives the analysis so the students have a general understanding of how the methods work which will provide a framework for future analytical decision making and interpretation of results. The course comprises modules that both build upon each other but also can be taken independently given a basic level of statistical understanding.

# **PREREQUISITES**

None.

# COMPETENCIES & OBJECTIVES

Upon completion of this course, students will be able to:

- 1. Use appropriate methods to summarize and visualize public health data.
- 2. Select and perform one and two sample hypothesis tests and confidence intervals for outcomes in public health research and practice.
- 3. Compute appropriate sample size and power for designing population-based studies.
- 4. Apply appropriate methods to assess associations between variables in public health datasets.
- 5. Analyze public health data using statistical computer packages and interpret output.

# COURSE MATERIALS, READINGS, & SUPPLEMENTALS

# REQUIRED

Daniel, W. W., & Cross, C. L. (2019). *Biostatistics: A Foundation for Analysis in the Health Sciences* (Eleventh edition). Hoboken, NJ: Wiley. ISBN: 978-1119496700.

# OPTIONAL

None.

# COURSE & STUDENT REQUIREMENTS

# ONLINE SYNCHRONOUS COURSE

This is an online synchronous course. Synchronous means that interactions are happening at the same and in real-time each week. All interactions and assignments will utilize Internet technologies.

# TECHNICAL REQUIREMENTS

Refer to Appendix A for the technical requirements for this course.

Computer-based quizzes may require Respondus® LockDown Browser and or Respondus® Monitor. Mac users will be required to use Safari for these assessments. While broadband Internet is preferred, it is required when attempting quizzes requiring Respondus® LockDown Browser and or Respondus® Monitor. For more information on using LockDown Browser and a Webcam for online quizzes, refer to Appendix B.

# E-MAIL & INTERNET CONNECTIVITY

You must have an active Tulane e-mail account and access to the Internet. You must use your Tulane e-mail account or Canvas Inbox for all e-mail communications with your instructor and teaching assistant, and with faculty and staff, for all Tulane-related matters. All instructor, School, and University correspondence will be sent to your Tulane e-mail. Please plan on checking your Tulane e-mail account regularly for course-related messages, even if your Tulane e-mail is forwarded.

**Important note:** While all the messages generated within Canvas will be automatically forwarded to your Tulane e-mail account, the mail you receive in your Tulane e-mail account (including mail from your SPHTM Online advisor, SPHTM Online director, SPHTM Online Classroom Support, SPHTM dean, etc.) will NOT be forwarded to your Canvas Inbox. In other words, please be sure to check your Tulane e-mail account regularly.

This course uses Canvas for the facilitation of communications between faculty and students, the housing of course materials, submission of assignments, and the posting of grades. You can access the course site by logging into <u>Canvas</u>. <u>Zoom</u>, a cloud-based video communications app, is used to deliver an immersive, live virtual classroom experience with real-time communications with your instructor and peers. Information on how to join live sessions will be available on <u>Canvas</u>.

# CANVAS, ZOOM, OR CAMPUS NETWORK OUTAGE

When access to Canvas, Zoom, or the campus network is not available for an extended period, you can reasonably expect the class to be canceled or that the due date for an assignment will be extended to the next day.

# ATTENDANCE & PARTICIPATION

Attendance and participation in an online course means actively participating in all the asynchronous and synchronous online activities. Participation in asynchronous activities means viewing course content and completing assignments within the given time frames. Attendance and participation in synchronous activities is strongly encouraged but not required. If you choose to attend and participate, this means logging into the live session at the scheduled time and participating in all the activities. Not attending or reviewing the recording of a live session will interfere with your learning and will have a negative effect on your performance and your grade.

# LIVE SESSION RECORDINGS

Live session recordings are provided as a courtesy and will appear in the "Cloud Recordings" tab of the Zoom page on the course Canvas site. Recordings provide students with the opportunity to review all or portions of a live session. Every effort will be made to post recordings promptly within a few hours of the close of session; most will be available within 24-48 hours.

Students are encouraged to interact dynamically with the recording in the following "split-screen" way. Resize the recording window and accompanying analytical program (i.e., Excel or SPSS) such that it fills the left- and right-hand sides of your screen, respectively. Pause, forward, and rewind accordingly as you work through the example provided in class. For example, if there is a part of the demonstration that you did not quite follow, pause the video and rewind to the appropriate part on the video timeline. This allows you to move at your own pace since the Instructor may cover material at a rate faster than you are comfortable absorbing. Repeat this process as needed.

# STUDYING & PREPARATION TIME

This course requires you to spend time preparing for and completing assignments. A three-credit course requires 135 hours of student work. Therefore, expect to spend approximately 9 hours a week preparing for and actively participating in this course.

# SUBMITTING ASSIGNMENTS

All assignments must be submitted on Canvas. Each assignment will have a designated place for submission. **E-mail submissions, or submissions by assignment comments, will not be accepted.** 

### LATE OR MISSED ASSIGNMENTS

To complete this course, all assignments must be completed and submitted. Unless the instructor is notified before the assignment is due and provides an opportunity for you to submit the assignment late, you will earn a zero-grade. If the instructor provides you an opportunity to submit the assignment late, a late penalty of 10% each day late will be applied. Failure to satisfactorily complete and submit all assignments in this course may result in a failing grade for the course.

### RESUBMISSIONS

Unless otherwise noted, resubmissions are not allowed.

# **EXTRA CREDIT**

Unless otherwise noted, extra credit is not offered.

# WITHDRAWING FROM THE COURSE

If you believe it is necessary to withdraw from the course, please see the <u>Academic Calendar</u> and the <u>Academic Standards</u> <u>Policy and Procedures for Master's Programs</u> for full details and deadlines on the types of withdrawals that are available and their procedures. After reviewing, consult with your academic advisor.

# **ETIQUETTE**

For more information about etiquette for online communications and live sessions, refer to Appendix C.

# **COURSE GRADING**

# **GRADES & GRADING SCALE**

Assignment of letter grades is based on a percentage of points earned. The letter grade will correspond to the following percentages earned. All course requirements must be completed before a grade is assigned.

94.5% and above	A	82.5% to less than 87.5%	В	Below 69.5%	F
89.5% to less than 94.5%	A-	79.5% to less than 82.5%	B-		
87.5% to less than 89.5%	B+	69.5% to less than 79.5%	С		

# INCOMPLETE GRADE

An incomplete grade, "I", is given at the discretion of the instructor when, in their view, extenuating circumstances prevent a student from completing work assigned during the semester and with the understanding that the remaining work can be completed within 30 days. Incomplete grades are also given when a student's absence from a final examination has been excused by the SPHTM Online director before or within one day following the final examination. Incomplete grades must be

resolved within 30 days after the end of the semester, or they are changed to Fs. The "I" will remain on the student's transcript, accompanied by the final course grade. Requests for extensions of the 30-day deadline must be made in writing by the student and must be approved by the instructor, the SPHTM Online director, and the Sr. Associate Dean for Student Experience.

Extensions are approved only when a student has tried to complete the missing work within the original 30-day period, but, in the view of the instructor, the SPHTM Online director, and the Sr. Associate Dean for Student Experience, has been prevented from completing the work by some extenuating circumstance beyond the student's control. Extensions must be approved before the 30-day deadline expires; extensions are not approved retroactively.

# SUMMARY OF ASSIGNMENTS

The Summary of Assignments is below.

Assignment	Percentage	Due	Course Objectives
8x Post-Live Session Assessments	40% (5% each)	Weekly	1-5
Exam #1	20%	SPHL 6050-80 due Oct 12 by 11:59 PM SPHL 6050-81 due Oct 12 by 11:59PM	1-5
		SPHL 6050-82 due Oct 13 by 11:59 PM	
Exam #2	20%	SPHL 6050-80 due Nov 16 by 11:59 PM	1-5
		SPHL 6050-81 due Nov 16 by 11:59PM	
		SPHL 6050-82 due Nov 17 by 11:59 PM	
Exam #3	20%	SPHL 6050-80 due Dec 21 by 9:20 PM	1-5
		SPHL 6050-81 due Dec 21 by 9:20 PM	
		SPHL 6050-82 due Dec 21 by 9:20 PM	

The requirements and expectations for assignments can be found on Canvas.

# WEEKLY COURSE SCHEDULE

The Weekly Course Schedule is below.

Week	Course Objectives	Topics	Activities
#1	1-5	Module 1:	Activities:
SPHL 6050-80 08/24 - 08/30		Introduction to Biostatistics	<ul><li>Read Chapter 1</li><li>Contribute to this week's</li></ul>
SPHL 6050-81 08/25 - 08/31			discussion if you have any questions
SPHL 6050-82 08/26 - 09/01			

#2 SPHL 6050-80 08/31 – 09/06 SPHL 6050-81 09/01 – 09/07 SPHL 6050-82		Tulane University closed due to restoration post-Hurricane Ida	Live Session:  SPHL 6050-80 08/24 at 6.30-9.20pm  SPHL 6050-81 08/25 at 6.30-9.20pm  SPHL 6050-82 08/26 at 6.30-9.20pm
#3  SPHL 6050-80 09/07-09/13  SPHL 6050-81 09/08 - 09/14  SPHL 6050-82 09/09 - 09/15		Tulane University closed due to restoration post-Hurricane Ida	
#4  SPHL 6050-80 09/14 - 09/20  SPHL 6050-81 09/15 - 09/21  SPHL 6050-82 09/16 - 09/22	1-5	<ul> <li>Module 2:</li> <li>Data Visualization</li> <li>Descriptive Statistics</li> </ul>	<ul> <li>Read Chapter 2</li> <li>Contribute to this week's discussion if you have any questions</li> <li>Complete Pre-Live Session Activity Module 2         <ul> <li>SPHL 6050-80 due by 09/14 at 6.00pm</li> <li>SPHL 6050-81 due by 09/15 at 6.00pm</li> <li>SPHL 6050-82 due by 09/16 at 6.00pm</li> </ul> </li> <li>Live Session:         <ul> <li>SPHL 6050-80 09/14 at 6.30-9.20pm</li> <li>SPHL 6050-81 09/15 at 6.30-9.20pm</li> </ul> </li> <li>SPHL 6050-82 09/16 at 6.30-9.20pm</li> </ul> <li>Assignments:         <ul> <li>Post-Live Session Assessment Module 2</li> <li>SPHL 6050-80 due by 09/20 at 11.59pm</li> <ul> <li>SPHL 6050-81 due by 09/21 at 11.59pm</li> </ul> </ul></li>

			<ul> <li>SPHL 6050-82 due by</li> <li>09/22 at 11.59pm</li> </ul>
#5 SPHL 6050-80 09/21 - 09/27 SPHL 6050-81 09/22 - 09/28 SPHL 6050-82 09/23 - 09/29	1-5	<ul> <li>Introduction to Probability</li> <li>Binomial Distribution</li> <li>Fall Break is from 9/23 to 9/26 but does not affect the Post-Live Session Assessment due dates.</li> <li>For section 82's Live Session on 9/23, please attend or watch the Live Session or Zoom recording from Tuesday's or Wednesday's Live Session on September 21 or 22, respectively.</li> </ul>	Activities:  • Read Chapters 3 (sections 3.1-3.4) and 4 (sections 4.1-4.3)  • Contribute to this week's discussion if you have any questions  • Complete Pre-Live Session Activity Module 3  • SPHL 6050-80 by 09/21 at 6.00pm  • SPHL 6050-81 by 09/22 at 6.00pm  • SPHL 6050-82 by 09/23 at 6.00pm  Live Session:  • SPHL 6050-80 09/21 at 6.30-9.20pm  • SPHL 6050-81 09/22 at 6.30-9.20pm  • SPHL 6050-82 09/23 at 6.30-9.20pm  • SPHL 6050-82 09/23 at 6.30-9.20pm  Assignments:  • Post-Live Session Assessment Module 3  • SPHL 6050-80 due by 09/27 at 11.59pm  • SPHL 6050-81 due by 09/28 at 11.59pm  • SPHL 6050-82 due by 09/29 at 11.59pm
#6 SPHL 6050-80 09/28 – 10/04 SPHL 6050-81 09/29 – 10/05 SPHL 6050-82 09/30 – 10/06	1-5	Module 4:  • The Normal Distribution	Activities:  Read Chapters 4 (sections 4.5-4.7) and 5 (sections 5.1-5.6)  Contribute to this week's discussion if you have any questions  Complete Pre-Live Session Activity Module 4  SPHL 6050-80 by 09/28 at 6.00pm  SPHL 6050-81 by 09/29 at 6.00pm  SPHL 6050-82 by 09/30 at 6.00pm  Live Session:  SPHL 6050-80 09/28 at 6.30-9.20pm

			<ul> <li>SPHL 6050-81 09/29 at 6.30-9.20pm</li> <li>SPHL 6050-82 09/30 at 6.30-9.20pm</li> <li>Assignments:</li> <li>No Post-Live Session Assessment due this week, this week's material will be on Exam #1</li> </ul>
#7 SPHL 6050-80 10/05 - 10/11 SPHL 6050-81 10/06 - 10/12 SPHL 6050-82 10/07 - 10/13	1-5	Exam #1 – No Live Session  Attend the SALSA Doc Exam Study Groups on Friday and Monday of this academic week, from 5 to 6:15 PM and 6:30 to 8 PM New Orleans Central time, respectively.  Please refer to the Zoom page of the SALSA Doc site for the Zoom link.  Attendance is not required but strongly encouraged.  Please note that for section 80 the exam will open on Wednesday of the academic week and is due on Tuesday rather than Monday, so students have the opportunity to attend the SALSA Doc Exam Study Groups.	Assignments:  • Exam #1  ○ SPHL 6050-80 due by  10/12 at 11.59pm  ○ SPHL 6050-81 due by  10/12 at 11.59pm  ○ SPHL 6050-82 due by  10/13 at 11.59pm
#8 SPHL 6050-80 10/12 – 10/18 SPHL 6050-81 10/13 – 10/19 SPHL 6050-82 10/14 – 10/20	1-5	Module 5: • Estimation • Confidence Intervals	<ul> <li>Read Chapter 6 (sections 6.1-6.4, 6.7)</li> <li>Contribute to this week's discussion if you have any questions</li> <li>Complete Pre-Live Session Activity Module 5         <ul> <li>SPHL 6050-80 by 10/12 at 6.00pm</li> <li>SPHL 6050-81 by 10/13 at 6.00pm</li> <li>SPHL 6050-82 by 10/14 at 6.00pm</li> </ul> </li> <li>Live Session:         <ul> <li>SPHL 6050-80 10/12 at 6.30-9.20pm</li> <li>SPHL 6050-81 10/13 at 6.30-9.20pm</li> </ul> </li> <li>SPHL 6050-82 10/14 at 6.30-9.20pm</li> <li>SPHL 6050-82 10/14 at 6.30-9.20pm</li> <li>SPHL 6050-82 10/14 at 6.30-9.20pm</li> <li>Assignments:         <ul> <li>Post-Live Session Assessment Module 5</li> <li>SPHL 6050-80 due by 10/18 at 11.59pm</li> </ul> </li> </ul>

			<ul> <li>SPHL 6050-81 due by 10/19 at 11.59pm</li> <li>SPHL 6050-82 due by 10/20 at 11.59pm</li> </ul>
#9 SPHL 6050-80 10/19 – 10/25 SPHL 6050-81 10/20 – 10/26 SPHL 6050-82 10/21 – 10/27	1-5	Module 6:  • Hypothesis Testing	• Read Chapter 7 (sections 7.1-7.2) • Contribute to this week's discussion if you have any questions • Complete Pre-Live Session Activity Module 6 ○ SPHL 6050-80 by 10/19 at 6.00pm ○ SPHL 6050-81 by 10/20 at 6.00pm ○ SPHL 6050-82 by 10/21 at 6.00pm  Live Session: • SPHL 6050-80 10/19 at 6.30-9.20pm • SPHL 6050-81 10/20 at 6.30-9.20pm • SPHL 6050-82 10/21 at 6.30-9.20pm • SPHL 6050-82 10/21 at 6.30-9.20pm  Assignments: • Post-Live Session Assessment Module 6 ○ SPHL 6050-80 due by 10/25 at 11.59pm ○ SPHL 6050-81 due by 10/26 at 11.59pm ○ SPHL 6050-82 due by 10/27 at 11.59pm
#10 SPHL 6050-80 10/26 – 11/01 SPHL 6050-81 10/27 – 11/02 SPHL 6050-82 10/28 – 11/03	1-5	Module 7:  • Two-Sample T-Test  • F-Test on Variances	Activities:  Read Chapter 7 (sections 7.2, 7.3, 7.8)  Contribute to this week's discussion if you have any questions  Complete Pre-Live Session Activity Module 7  SPHL 6050-80 by 10/26 at 6.00pm  SPHL 6050-81 by 10/27 at 6.00pm  SPHL 6050-82 by 10/28 at 6.00pm  Live Session:  SPHL 6050-80 10/26 at 6.30-9.20pm

			<ul> <li>SPHL 6050-81 10/27 at 6.30-9.20pm</li> <li>SPHL 6050-82 10/28 at 6.30-9.20pm</li> <li>Assignments:         <ul> <li>Post-Live Session Assessment Module 7</li> <li>SPHL 6050-80 due by 11/01 at 11.59pm</li> <li>SPHL 6050-81 due by 11/02 at 11.59pm</li> <li>SPHL 6050-82 due by 11/03 at 11.59pm</li> </ul> </li> </ul>
#11 SPHL 6050-80 11/02 - 11/08 SPHL 6050-81 11/03 - 11/09 SPHL 6050-82 11/04 - 11/10	1-5	<ul> <li>Module 8:</li> <li>Paired T-Test</li> <li>Power and Sample Size</li> </ul> Please note that Module 8 is combined with Module 9 in the same academic week.	<ul> <li>Read Chapter 7 (sections 7.4, 7.9, 7.10)</li> <li>Contribute to this week's discussion if you have any questions</li> <li>Complete Pre-Live Session Activity Module 8         <ul> <li>SPHL 6050-80 by 11/02 at 6.00pm</li> <li>SPHL 6050-81 by 11/03 at 6.00pm</li> <li>SPHL 6050-82 by 11/04 at 6.00pm</li> </ul> </li> <li>Live Session:         <ul> <li>SPHL 6050-81 11/02 at 6.30-9.20pm</li> <li>SPHL 6050-81 11/03 at 6.30-9.20pm</li> </ul> </li> <li>SPHL 6050-82 11/04 at 6.30-9.20pm</li> </ul> <li>Assignments:         <ul> <li>Post-Live Session Assessment Module 8</li> <li>SPHL 6050-80 due by 11/08 at 11.59pm</li> <li>SPHL 6050-82 due by 11/09 at 11.59pm</li> <li>SPHL 6050-82 due by 11/10 at 11.59pm</li> </ul> </li>
	1-5	Module 9:  • Binomial Proportions	<ul> <li>Activities:</li> <li>Read Chapters 7 (sections 7.5, 7.6) and 12 (sections 12.4, 12.5)</li> <li>Contribute to this week's discussion if you have any questions</li> <li>Complete Pre-Live Session Activity Module</li> </ul>

			<ul> <li>SPHL 6050-80 by         11/02 at 6.00pm</li> <li>SPHL 6050-81 by         11/03 at 6.00pm</li> <li>SPHL 6050-82 by         11/04 at 6.00pm</li> <li>Live Session:     </li> <li>SPHL 6050-80 11/02 at         6.30-9.20pm</li> <li>SPHL 6050-81 11/03 at         6.30-9.20pm</li> <li>SPHL 6050-82 11/04 at         6.30-9.20pm</li> <li>SPHL 6050-82 11/04 at         6.30-9.20pm</li> <li>Assignments:         No Post-Live Session         Assessment due this week,         Module 9's material will be on         Exam #2</li> </ul>
#12 SPHL 6050-80 11/09 – 11/15 SPHL 6050-81 11/10 – 11/16 SPHL 6050-82 11/11 – 11/17	1-5	Exam #2 – No Live Session  Attend the SALSA Doc Exam Study Groups on Friday and Monday of this academic week, from 5 to 6:15 PM and 6:30 to 8 PM New Orleans Central time, respectively.  Please refer to the Zoom page of the SALSA Doc site for the Zoom link.  Attendance is not required but strongly encouraged.  Please note that for section 80 the exam will open on Wednesday of the academic week and is due on Tuesday rather than Monday, so students have the opportunity to attend the SALSA Doc Exam Study Groups.	Assignments:  • Exam #2  ○ SPHL 6050-80 due by  11/16 at 11.59pm  ○ SPHL 6050-81 due by  11/16 at 11.59pm  ○ SPHL 6050-82 due by  11/17 at 11.59pm
#13 SPHL 6050-80 11/16 - 11/22 SPHL 6050-81 11/17 - 11/23 SPHL 6050-82 11/18 - 11/24	1-5	Module 10:  Contingency Tables Chi-Square  Please note that due to the 11/22 – 11/28 Thanksgiving Holiday, for all sections the Post-Live Session Assessment is due on 11/21.	Activities:  Read Chapter 12 (sections 12.1, 12.2, 12.4, 12.5)  Contribute to this week's discussion if you have any questions  Complete Pre-Live Session Activity Module 10  SPHL 6050-80 by 11/16 at 6.00pm  SPHL 6050-81 by 11/17 at 6.00pm  SPHL 6050-82 by 11/18 at 6.00pm  Live Session:  SPHL 6050-80 11/16 at 6.30-9.20pm

			<ul> <li>SPHL 6050-81 11/17 at 6.30-9.20pm</li> <li>SPHL 6050-82 11/18 at 6.30-9.20pm</li> <li>Assignments:</li> <li>Post-Live Session         Assessment Module 10         SPHL 6050-80 due by 11/21 at 11.59pm         SPHL 6050-81 due by 11/21 at 11.59pm         SPHL 6050-82 due by 11/21 at 11.59pm     </li> </ul>
#14 SPHL 6050-80 11/23 – 11/29 SPHL 6050-81 11/24 – 11/30 SPHL 6050-82 11/25 – 12/01		11/22 – 11/28 Thanksgiving Break – No Live Session, No Post-Live Session Assessment due	
#15 SPHL 6050-80 11/30 – 12/06 SPHL 6050-81 12/01 – 12/07 SPHL 6050-82 12/02 – 12/08	1-5	Module 11:  • Regression • Correlation	Activities:  • Read Chapter 9 (sections 9.1-9.4)  • Contribute to this week's discussion if you have any questions  • Complete Pre-Live Session Activity Module 11  • SPHL 6050-80 by 11/30 at 6.00pm  • SPHL 6050-81 by 12/01 at 6.00pm  • SPHL 6050-82 by 12/02 at 6.00pm  Live Session:  • SPHL 6050-80 11/30 at 6.30-9.20pm  • SPHL 6050-81 12/01 at 6.30-9.20pm  • SPHL 6050-82 12/02 at 6.30-9.20pm  • SPHL 6050-82 12/02 at 6.30-9.20pm  Assignments:  • Post-Live Session Assessment Module 11  • SPHL 6050-80 by 12/06 at 11.59pm  • SPHL 6050-81 by 12/07 at 11.59pm  • SPHL 6050-82 by 12/08 at 11.59pm

#16 SPHL 6050-80 12/07 -12/13 SPHL 6050-81 12/08 - 12/13 SPHL 6050-82 12/09 - 12/13	1-5	<ul> <li>Module 12:</li> <li>Correlation Coefficient</li> <li>Multiple Linear Regression</li> <li>ANOVA</li> <li>Survival Analyses</li> </ul> Please note that section 82's academic week ends one day earlier on 12/14 instead of 12/15.	<ul> <li>Activities:</li> <li>Read Chapters 9 (sections 9.6, 9.7) and 10 (sections 10.1-10.4)</li> <li>Contribute to this week's discussion if you have any questions</li> <li>There is no Pre-Live Session Activity for Module 12</li> <li>Live Session:</li> <li>SPHL 6050-80 12/07 at 6.30-9.20pm</li> <li>SPHL 6050-81 12/08 at 6.30-9.20pm</li> <li>SPHL 6050-82 12/09 at 6.30-9.20pm</li> <li>Assignments: <ul> <li>No Post-Live Session Assessment due this week, Module 12's material will be on Exam #3</li> </ul> </li> </ul>
#17 SPHL 6050-80 12/14 -12/21 SPHL 6050-81 12/14 - 12/21 SPHL 6050-82 12/14 - 12/21	1-5	Exam #3 – No Live Session  Attend the SALSA Doc Exam Study Groups on Friday and Monday of this academic week, from 5 to 6:15 PM and 6:30 to 8 PM New Orleans Central time, respectively.  Please refer to the Zoom page of the SALSA Doc site for the Zoom link.  Attendance is not required but strongly encouraged.  Exam #3 will open on 12/14 and submissions are due for all sections on 12/21 by 9.20 PM New Orleans Central Time.	Assignments:  • Exam #3  ○ SPHL 6050-80 due by  12/21 at 9.20pm  ○ SPHL 6050-81 due by  12/21 at 9.20pm  ○ SPHL 6050-82 due by  12/21 at 9.20pm

# TIPS ON HOW TO SUCCEED IN THIS COURSE

The following are tips on how to succeed in this course:

- Check your Tulane e-mail account regularly, even if you have your Tulane e-mail account forwarded
- Log in to Canvas daily and check for any new announcements in your courses
- · Communicate with your instructor and academic advisor
- Create a study schedule so that you do not fall behind

# Description of Required Assignments and Exams:

The weekly assessments and 3 exams are based on specific methods shown in Live Sessions applied to secondary datasets, with an emphasis on application while acknowledging theoretical underpinnings. Students will be critiqued on the appropriateness of their choice of methods, execution, final results and interpretations. Specific feedback with the

corresponding point deduction will be provided in the comments section of a given file submission area. Students may use this comments area to communicate directly with the Instructor and/or Teaching Assistant any follow up questions or comments.

In general, as each problem set and analytical approach are unique, there is no general rubric that can be applied across all problems. This class takes a "see-then-do" approach, i.e., in terms of grading, watch closely how the Instructor demonstrates skills and concepts and build into your analysis from ground up all components to the best of your ability for consideration of full credit.

# More on Examinations:

Exams are based on techniques employed in assessments. However, the specific technique or techniques required to approach a dataset will not necessarily be indicated and the student must decide as to which method to use. This mimics statistics in practice. In general, the problems in the exams have a similar look and feel to those in the assessments but there may be slight nuances that are not specifically covered in Live Session in order to promote independent analytical thinking. Statistics is not necessarily a "cookie-cutter" discipline but rather there is creative thinking within a given framework at this academic level.

Exams are longer than specific assessments and consist of a conglomeration of different types of datasets requiring varying techniques.

Exams are "take-home", i.e. exams are released in PDF form on Canvas at the beginning of the academic week and are due at the close of the academic week.

# ACCESSIBILITY STATEMENT

Tulane University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability, please let the instructor know immediately so that you can privately discuss options. The instructor will never ask for medical documentation from you to support potential accommodation needs. Instead, to establish reasonable accommodations, the instructor may request that you register with the Goldman Center for Student Accessibility. After registration, make arrangements with the instructor as soon as possible to discuss your accommodations so they may be implemented in a timely fashion. For more information, contact the Goldman Center for Student Accessibility.

# ONE WAVE

Tulane University recognizes the inherent dignity of all individuals and promotes respect for all people. As "One Wave," Tulane is committed to providing an environment free of all forms of discrimination based on race, ethnicity, creed, religion, gender, gender identity and sexual orientation, as well as all forms of sexual harassment, including sexual assault, domestic and dating violence, and stalking. If you (or someone you know) has experienced or experiences discrimination, domestic violence, sexual assault, or sexual harassment, know that you are not alone. Resources and support are available. Learn more about One Wave at The Well for Health Promotion.

# STUDENT CONDUCT STATEMENT

As a community, Tulane University is dedicated to learning and the advancement of knowledge and expects and requires the behavior of all its students to be compatible with its high standards of scholarship and conduct. Acceptance of admission to the University carries with it an obligation for the welfare of the community. Freedom to learn can be preserved only through respect for the rights of others, for the free expression of ideas, and for the law.

All individuals and groups of the Tulane University community are expected to speak and act with scrupulous respect for the human dignity of others, both within the classroom and outside it, in social and recreational as well as academic activities.

Tulane University will not tolerate any form of harassment or intimidation based on race, sex, color, religion, national origin, age, disability, genetic information, sexual orientation, gender identity, gender expression, pregnancy, marital status, military status, veteran's status, or any other status or classification prohibited by federal, state, or local law. Nor will it tolerate acts of hazing against individuals or groups or discrimination against any member of the Tulane community solely because they

express different points of view. The University encourages the free exchange of ideas and opinions, but insists that the free expression of views must be made with respect for the human dignity and freedom of others.

For more information, contact the Office of Student Conduct.

# ACADEMIC HONESTY AND PERSONAL INTEGRITY

Tulane University and the School of Public Health and Tropical Medicine supports and promotes academic honesty and personal integrity. Any form of academic dishonesty has no place in higher education. The University and the School do not tolerate dishonest efforts by its students. Students who are guilty of academic dishonesty can be expected to be penalized. Any student who knowingly assists another student in dishonest behavior is equally responsible. Violations of the School's Student Code of Academic Conduct may result in dismissal from the School and University. A complete description of the Student Code of Academic Conduct, violation definitions with emphasis on plagiarism, disciplinary procedures, consequences, and actions can be viewed on the School's Intranet. For more information on recognizing plagiarism, refer to https://www.plagiarism.org.

# SYLLABUS DISCLAIMER

The instructor views the course syllabus as an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule, but the possibility exists that unforeseen circumstances will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus if deemed necessary. Students will be notified promptly of any changes by e-mail or course announcements. Please remember to check your Tulane e-mail and the course announcements often.

# A NOTE ABOUT COURSE MATERIALS

All course materials are copyrighted and specifically prohibited from distribution, including uploading materials to commercial websites that provide students lecture notes, study guides, and other course materials. This includes, but is not limited to, assignments, homework questions and or answers, lecture notes, study guides, recordings, etc., along with any questions that are or might be intended for future assignments.

If you have any questions, please contact **SPHTM Online Classroom Support**.

# APPENDIX A: TECHNICAL REQUIREMENTS

While online learning tools at Tulane University are mobile responsive, students may use mobile devices such as tablets (e.g., iPad), mobile phones, and notebook computers (e.g., Chromebooks) to perform some academic activities, a Mac or PC must remain your primary device for your studies. For tablet and mobile devices, the latest version of Android, iOS, and Windows is recommended.

This course requires that you have access to a supported Mac (i.e., MacOS) or PC (i.e., Windows) with local administrative privileges that can access the Internet. You will need to have access to and can use the following:

- A Webcam and microphone
- A Web browser (i.e., Google Chrome, Microsoft Edge, Mozilla Firefox, or Safari)
  - o The latest version is recommended for Google Chrome, Microsoft Edge, Mozilla Firefox, or Safari.
- Adobe Acrobat Reader
  - o The latest version is recommended.
- Microsoft Office (including Microsoft Word, PowerPoint, and Excel)
  - o All students are required to have a currently supported version of Microsoft Office. Tulane University provides <u>Microsoft Office 365</u> as a free, renewable subscription to active, enrolled students.
- Broadband Internet
  - o A minimum bandwidth of 8 Mbps upload/download speed.
- Other course-specific may be required.
  - Any course-specific required software will be mentioned in the <u>Course Materials</u>, <u>Readings</u>, <u>& Supplementals</u> section.

Computer-based quizzes may require Respondus® LockDown Browser and or Respondus® Monitor. While broadband Internet is preferred, it is required when attempting quizzes requiring Respondus® LockDown Browser and or Respondus® Monitor. For more information on using LockDown® Browser and a Webcam for online quizzes, refer to Appendix B. Mobile devices such as tablets (e.g., iPad), mobile phones, and notebook computers (e.g., Chromebooks) are not supported with computer-based quizzes requiring Respondus® LockDown Browser and or Respondus® Monitor.

Be aware that some corporate computer policies do not allow for local administrative privileges and that some corporate firewalls block access to Zoom, Instructure Canvas, or Respondus® LockDown Browser. If you are planning to attend a live session or take an online quiz from work, you should test your access in advance.

You are responsible for having a reliable Mac or PC with local administrative privileges and a broadband Internet connection throughout the course.

If you have a question about the technical requirements or the technology being used in the course, contact <u>SPHTM Online Classroom Support</u> for assistance.

# APPENDIX B: USING LOCKDOWN® BROWSER & A WEBCAM

# ABOUT RESPONDUS® LOCKDOWN BROWSER AND A WEBCAM

This course may require the use of Respondus® LockDown Browser and a Webcam for online quizzes. The webcam can be built into your computer, or it can be the type that plugs in with a USB cable. To get a basic understanding of LockDown® Browser and the Webcam feature, watch a short video. A student Quick Start Guide is also available.

# DOWNLOAD RESPONDUS® LOCKDOWN BROWSER

<u>Download</u> and install the Tulane-specific LockDown Browser.

To ensure LockDown® Browser and the Webcam are set up properly, do the following:

- Start LockDown® Browser, log into Canvas, and select this course.
- Locate and select the **Help Center** button on the LockDown® Brower toolbar.
- Run the **Webcam Check** and, if necessary, resolve any issues.
- Run the **System & Network Check**. If a problem is indicated, see if a solution is provided in the Knowledge Base.

# REQUIREMENTS FOR TAKING A QUIZ USING RESPONDUS® LOCKDOWN BROWSER

The online quiz environment must mimic an "in-class" quizzing environment and must conform to the following requirements below.

# **QUIZZING AREA**

Failure to comply with the following will result in a zero-grade and may be reported to the Honor Board:

- The quizzing area must be a quiet, secure, fully lighted room.
  - O Lighting in the room must be bright enough to be considered "daylight" quality. The source of light must not be behind the quiz taker.
- There must be no writing visible on the desk, table, walls, or other surfaces in the quizzing area.
- Do not have music, a radio, or television playing in the background.
- Sit at a clean desk or clean table, not on a bed or couch.
- Only the testing computer and external cameras/microphone are permitted on the desk or table.
  - External cameras must be placed on the lid of the laptop/monitor or in a location with a constant, uninterrupted view of the quiz taker. Failure to comply with the following is considered cheating, which will result in a zero grade, and may be reported to the Honor Board:
    - The camera must always be focused on the quiz taker.
    - The lens of the camera must not be covered at any time during the quiz.
- The desk or table must be cleared of all materials not required for the quiz. The following are prohibited from use during the quiz. Use of the following items is considered cheating, which will result in a zero-grade, and may be reported to the Honor Board:
  - o Any software except for the Respondus® LockDown Browser, including,
  - o Other web sites,
  - o Books (electronic or hardcopy),
  - o Notes (electronic or hardcopy),
  - o Calculator (electronic or hardcopy), and
  - o Backpacks, purses, or any other items.
- Internet-capable devices such as a cell phone, e-reader, smartwatch, or Internet-capable calculator must not be visible on the desk, table, or quizzing area.
- · Additional computers, monitors, and display devices are not allowed in the quizzing area.
- Before logging into Canvas, close all other programs and windows on the quizzing computer.
- No one other than the quiz-taker is permitted to enter the testing area during the quiz.
- A blank scratch paper is permitted. If scratch paper is used, then both sides of the paper are to be held up to the camera before the quiz.

Should an instructor permit open-books and or open-notes for an online quiz, only hardcopy books and hardcopy notes are allowed. Electronic books and or notes are prohibited.

# **BEHAVIOR**

Failure to comply with the following is considered cheating, which will result in a zero-grade, and may be reported to the Honor Board:

• Do not leave the quizzing area at any time during the quiz unless specifically permitted in instructions for that quiz.

- You are being recorded; Dress as if you were in a public setting.
- Hats and hoodies are not allowed.
- Headphones, earbuds, earplugs, or similar audio devices are not allowed.
- Do not talk out loud during quizzing.
- Do not use a phone for any reason during quizzing.
- No one other than the quiz-taker is permitted to enter the quiz area during the quiz.
- Do not talk with anyone else or communicate with others by any other means during quizzing.
- Do not take the computer into another room to finish quizzing. The quiz must be taken in the same room that is scanned in the "Environment Scan."

# STARTING YOUR QUIZ

# WEBCAM CHECK

You will need a working Webcam and mic to attempt the quiz. Without a working Webcam and mic, you will not be able to start your quiz.

### STUDENT PHOTO

When prompted for your "Student Photo," take your picture and not a picture of your ID.

# SHOW ID

When prompted to "Show ID," you will need to show an acceptable and valid government-issued identification with your name, signature, and photograph. Failure to comply with the following will result in a zero-grade:

- Your complete name and signature as shown on your ID must match the name you registered under, even if your name has changed (for any reason, including marriage or divorce).
- Your ID must be original, recognizable, and not expired. The only exception is if your driver's license has expired, but you present it along with your Department of Public Safety renewal certificate. These two documents together are acceptable provided the names on both documents match exactly. If a provisional driver's license is issued instead of a renewal certificate, this is acceptable if it contains your photo, signature, and expiration date.
- A Tulane ID is acceptable if it contains your name, student ID number, photo, and classification (e.g., administrator, faculty, staff, or student).
- Employer-provided IDs, military IDs, and veteran IDs are not acceptable forms of identification.

# **ENVIRONMENT SCAN**

When prompted to do an "Environment Check," you will need to show your surroundings. Your surroundings will include your desk and a 360° view of the space you are in. If your webcam is built into your computer, do the best you can. Failure to comply will result in a zero-grade.

# APPENDIX C: ETIQUETTE FOR ONLINE COMMUNICATIONS & LIVE SESSIONS

# **NETIQUETTE**

"Netiquette" is the term used to describe rules of courtesy in using online communication. These rules are intended to help you use the medium effectively and considerately. When communicating in an online course, you are addressing a group of people. The following guidelines will help you to communicate effectively:

- Do not say things that you would not say in a face-to-face environment or any public place.
- Do not share confidential information.

- Use the subject line to identify the content of the message.
- Stay up to date on forum postings by reading them regularly.
- Always comply with copyright by citing your references when posting online content.
- Use individual e-mail for messages to individuals rather than tying up the group list.
- Do not forward e-mails or discussion forum postings without asking permission from the original author.
- Electronic communication does not provide visual cues, such as smiles or frowns, that face-to-face communication allows. Therefore, humor and sarcasm in written text might be misunderstood and interpreted as rude or inflammatory in the online environment. Choose your words carefully to avoid hurting or angering anyone. Should emotions become inflamed, do not promote anger. Take a cooling down period, perhaps overnight, before you engage in the online activity again.
- Avoid using all capital letters in your text. This is considered 'shouting' in the online classroom.
- Aim for clarity and readability in your text.
- Use proper English and remember to spell-check.
- If you do not understand the assignment's directions or the posts of your classmates, do not be afraid to ask for clarification.
- The online classroom is a community of learners. Participate actively in the community and reach out to your classmates with a helping hand.

More common sense netiquette guidelines can be found in The Core Rules of Netiquette by Virginia Shea at <a href="http://www.albion.com/netiquette/book/index.html">http://www.albion.com/netiquette/book/index.html</a>.

# LIVE SESSIONS

The following are rules of courtesy in participating in live sessions. The rules are intended to help use the medium effectively and considerately. When participating in live sessions, you are present in front of a group of people. The following guidelines will help you to participate effectively in the live sessions.

Wear appropriate clothes. Just like you would not show up to an office meeting or class with your PJs on, you should dress appropriately for a live session. Dress as you would in the office or class. It will help you stay focused and in "work" or "class" mode, even if you are miles away from home. It is still a meeting for class, and you should treat it that way. You can put the PJs back on when the camera stops rolling.

A professional setting is a good etiquette. You do not need to be at your desk to look professional, but your instructor and your peers do not need to see your messy bedroom or kid's toys everywhere. Whether you are in a comfortable chair in the lounge or sitting at a kitchen worktop, pick a location with plenty of light and a neutral background.

**Limit distractions.** Just like there would not be dogs barking or kids crying in a classroom, you should do your best to keep background noise to a minimum during a live session. You do not want your instructor and peers struggling to follow what you are saying because they cannot hear over background noise. Make sure others around you know that you are in class, so they respect your space.

Learn how to mute your microphone. When you are not talking, it is best to mute your microphone. This is especially important if you are joining from somewhere with unavoidable background noise, such as a café or airport. Your instructor and peers do not need to hear you chewing or idly tapping on your keyboard (noise that fades into the background during a formal meeting, but is amplified in a virtual setting). Even better, keep food until after the meeting so the other participants are not watching you eat the whole time.

Give your full attention. Although it is tempting to check your e-mails or flick through papers when you are not speaking, there is a good chance you will miss key information, not to mention it is disrespectful. Use attentive body language and communication and be present for the live session. You will get so much more out of the live session if you distance yourself from distractions that can wait until later.

**Speak clearly and use good manners.** There is nothing worse than someone talking over you during class, and it is the same in the virtual world.

When it is your turn to talk, speak clearly and slowly enough for everyone to follow what you are saying. Remember that sound quality is important in this medium.

Although there may be unavoidable lags due to slower connections, try to ensure no one speaks over anyone else.

**Be prepared for technical difficulties.** It is impossible to prepare for every eventuality, but you should log on to the live session in good time to make sure everything is working properly. Make sure the connection is stable and that you have a backup plan if necessary.

Just like in a regular class, ensure you have access to all the resources you will need, such as meeting or class notes. If you are accessing documents on a cloud platform, ensure everything is working beforehand.

If you are experiencing technical difficulties, contact SPHTM Online Classroom Support.