Proposed Course Schedule, Psychology 210

This schedule is tentative. Topics are subject to change; however, I will make every effort to give the class plenty of advance notice of changes.

WEEK	TOPIC	RECITATION TOPIC	MY NOTES/ SUPPLEMENTAL READING Chapter[1]	VIDEOS[2] and Class Prep Work	WHAT ARE WE WORKING ON THIS WEEK?[3]	EXTRA PRACTICE
1: 8/19	Introduction to Statistics	*No Recitations this week*	When viewing videos or doing readings, you may find it helpful to use my notes on the topic Sakai>Resources> Notes and Tables 📝 Notes: Introduction to Statistics Notes 📖 Readings: Privitera: 1 Lane: 1 OpenStax: 1 (see notes below for links to online texts)	*Please read this by Tuesday's class:* Syllabus Register for Polleverywhere Install UNC Check-in app Register for Piazza Please view these or complete readings before class Thursday 8/22: Sakai> Resources>Dr. S Screencasts> Part 1 Descriptive vs. Inferential [cc:https://media.unc.edu/w/XdQAAA/] Research Design; IV and DV [cc:https://media.unc.edu/w/fdQAAA/] Classifying Variables [cc:https://media.unc.edu/w/TdQAAA/] (For those who have not added pls click this link to view:) https://sakai.unc.edu/x/yyGShQ https://sakai.unc.edu/x/7AxRAg https://sakai.unc.edu/x/wuJtCk	By 8/23 12PM Assignment 1[4]: Surveys 1. For class: https://unc.az1.qualtrics.com/jfe/form/SV_9n5dAT3d2KuTX25 2. For UNC https://unc.az1.qualtrics.com/jfe/form/SV_1M4EpoPZTNTswaV Read syllabus Register for Polleverywhere Install UNC Check-in app Register for Piazza	Sakai More Practice: Introduction Practice Problems In-class practices> Practice Introductory Material Quiz 1 Privitera Chapter 1 Problems Privitera: Online Quiz https://edge.sagepub.com/priviteraess2e

[1] There a few different books available to supplement, if you would prefer not to watch videos or would like additional resources. Privitera is a book you can purchase or borrow from the UL, Lane and OpenStax are both online and downloadable as well. All are good texts, you're welcome to check each out to find one you like (and that may vary by topic). Privitera online quizzes for practice are open for all to take -- you do not need to purchase the book.

[2] The videos require flash (video has a quiz).To view the video file without flash, you can go to Sakai>Resources>Dr. S Screencasts>locate the folder for the topic and choose the mp4 file.

[3] Assignments may be started in class. Unless otherwise instructed, assignments will be due on Fridays at noon.

[4] Technically due by noon Friday, but ideally it would be completed PRIOR to our first class meeting.

2: 8/26	Frequency Distributions Graphing Distributions Introduction to SPSS	Frequency Distributions and Graphs Introductions SPSS **(please bring laptop)**	📝 Topic notes: Freq Dist 📖 Privitera: 2 Lane: 2 OpenStax: 2	Please view these or complete readings by 8/27: Frequency Distributions Intro [cc:https://media.unc.edu/w/X9QAAA/] Frequency Distribution Options [cc:https://media.unc.edu/w/YdQAAA/] Graphing Distributions [cc:https://media.unc.edu/w/Y9QAAA/] Describing Distribution: [cc:https://media.unc.edu/w/W9QAAA/] For Thursday: Please bring laptops to class	8/30 12PM Assignment 2 part 1 (survey only) Test that this site works for you for next week: (http://www.math.usu.edu/~schneit/Statlets/StandardDeviation/sd.html or http://www.math.usu.edu/~schneit/CTIS/SD/)	Sakai More Practice: Freq. Dist (from notes) In-class practices> Practice Frequency Distributions Quiz 1 Chapter 2 Problems Privitera: Online Quiz
3: 9/2	Central Tendency, Variability,	*No Monday Recitation (Labor Day); There will be no penalty if you are registered for Monday (please consider office hours this week for help!)*	📝 Central Tendency 📖 Privitera: 3 & 4 Lane: 3 OpenStax: 2	*Please read chapter 3 or watch these videos by 9/3 class:* Central Tendency Context (2:24) [cc:https://media.unc.edu/w/S9QAAA/] Mean (6:23) [cc:https://media.unc.edu/w/Z9QAAA/] Median (6:12) [cc:https://media.unc.edu/w/adQAAA/] Mode (3:32) [cc:https://media.unc.edu/w/a9QAAA/] Central Tendency Measures Compared (4:44): [cc:https://media.unc.edu/w/SdQAAA/] *Please read chapter 4.1-4.4 or watch these videos by 9/5 class:* Variability Context (1.5 mins) [cc:https://media.unc.edu/w/h9QAAA/] Range (1.5 mins) [cc:https://media.unc.edu/w/c9QAAA/] IQR (3 mins) [cc:https://media.unc.edu/w/ZdQAAA/]	Bring laptop to class 9/5 Make sure one of these sites work on your computer (http://www.math.usu.edu/~schneit/Statlets/StandardDeviation/sd.html or http://www.math.usu.edu/~schneit/CTIS/SD/) 9/6 noon Assignment 2 part 2 (upload as pdf)	In-class practices> Practice Central Tendency Practice Variability Learning Check 2 Quiz 2 Chapter 3&4 Problems Privitera: Online Quiz

				Standard Deviation Defined & Conceptual (3 mins) [cc:https://media.unc.edu/w/g9QAAA/]		
4: 9/9	Variability, SPSS	Describing and Graphing Distributions		**For Tuesday:** Standard Deviation Calculated [CC version: https://media.unc.edu/w/jdQAAA/ Please click CC and English] Degrees of Freedom (my first crack at screencasting!) http://unc.voicethread.com/share/2262737/ **For Thursday:** z-scores Calculated [CC version: https://media.unc.edu/w/jdQAAA/ Please click CC and English] z-scores Applications [CC: https://media.unc.edu/w/i9QAAA/] Normal Distribution & the Empirical Rule [CC: https://media.unc.edu/w/b9QAAA/]	9/9 11:55pm Quiz 1 This can be found in Sakai under Tests & Quizzes Bring your laptop 9/10+9/12 9/13 noon Assignment 3	Sakai More Practice: z Practice Practice using Empirical Rule Learning Check 3 Quiz 2 Chapter 6 Problems (not using z-table yet) Privitera: Online Quiz
5: 9/16	z-scores Correlation	Assignment 4	📝 Z-scores and correlation 📖 Privitera: 15 Lane: 4,7 OpenStax: 6,12 (note I suggest calculating r differently from text)	**For Tuesday:** (I know this seems like a lot, but many of these are pretty short. Seemed easier to break them up by topic so you wouldn't have to remember where to find certain parts later if you wanted to rewatch them.) Correlation Context and Types [CC: https://media.unc.edu/w/U9QAAA/] Scatterplots: Creating & Evaluating [CC: https://media.unc.edu/w/f9QAAA/] Prelude to r [CC: https://media.unc.edu/w/cdQAAA/] Calculating r	9/20 noon Assignment 4	Sakai More Practice: Scatterplots Correlation Correlation Practice 2 Learning Check 4 Quiz 3 Privitera: Online Quiz Correlation/Regression applets: http://www.stat.sc.edu/~west/javahtml/Regression.html http://istics.net/stat/Correlations/

			Skip Hyp. Test for now	[CC: https://media.unc.edu/w/R9QAAA/] What impacts r? [CC: https://media.unc.edu/w/idQAAA/] Coefficient of Determination [CC: https://media.unc.edu/w/T9QAAA/] **For Thursday:** Correlation Matrices: Creating & Evaluating [CC: https://media.unc.edu/w/VdQAAA/] Correlation does not Imply Causation [CC: https://media.unc.edu/w/UdQAAA/] Correlation Uses (optional) [CC: https://media.unc.edu/w/V9QAAA/]		
6: 9/23	Regression	Correlation Assignment 5	📝 Regression 📖 Privitera: 16 Lane: 14 OpenStax: 12 We'll focus less on computations, and more conceptual and interpretation Note: I will go more in-depth on multiple regression than text	**For Tuesday:** Regression Overview [cc:https://media.unc.edu/w/d9QAAA/] Regression Calculations (note: you will not need to calculate a or b, but will need to interpret them and construct a regression equation.) [cc:https://media.unc.edu/w/ddQAAA/] Regression Standard Error of the Estimate [cc:https://media.unc.edu/w/e9QAAA/] Regression in SPSS One Predictor (note: we will discuss multiple predictors in class Thursday, Also note, I predicted optimism using depression which is different from above, but values are all equal.) [cc:https://media.unc.edu/w/edQAAA/] Multiple Regression [cc:https://media.unc.edu/w/bdQAAA/]	9/23 11:55pm Quiz 2 9/27 noon Assignment 5	Sakai More Practice: Regression Regression Practice 2 Learning Check 5 Quiz 3 Privitera: Online Quiz

7: 9/30	Review and **EXAM 1 (10/3)**	Regression, Review/ Practice		Boxplots	9/30 11:55pm Quiz 3 10/3 Exam 1	
UNIT 2						
8: 10/7	Probability, Binomial distributions, Hypothesis Testing	*Review of Missed Concepts in Exam 1*	📝 Binomial Notes Hyp. Test Notes Binomial: Hypothesis Testing Privitera: 6 Lane: 5 OpenStax: 6	For Tuesday's class: Probability Overview Using the Unit Normal Table Binomial Distributions For Thursday's Class: Hypothesis Testing Why Can't We Accept the Null Hypothesis? Errors in Hypothesis Testing	10/11 noon Assignment 6 cancelled Please print or have access to Unit Normal Table for class (Resources > Topic Notes and Tables)	Sakai More Practice: Binomial Distribution Hypothesis Testing and r Logic of Hypothesis Testing Learning Check 6 Quiz 4 Privitera: Online Quiz
9: 10/14	Estimation/Fall break	*No Recitation Wednesday There will be no penalty if you are registered for Wednesday (please consider office hours this week for help!)*	📝 Estimation notes 11 5 (p. 152; binomial) Privitera: 11 Lane: 10, 7.7 OpenStax: 8	Continuation of Hyp. Testing & Probability Confidence Interval Overview Confidence Interval Calculations (Please note that I use the term "standard error" in this video, and that concept has not yet been formally introduced and will be discussed next Tuesday) Confidence Interval Technically Speaking (helpful for understanding technical interpretation)	10/14 11:55pm Quiz 4	Sakai More Practice: Confidence Intervals Practice Confidence Intervals Practice 2 Quiz 5 Privitera: Online Quiz

10: 10/21	Sampling Distributions	Assignment Hypothesis Testing and Estimation	📝 8 Sampling Dist. Notes Privitera: 7 Lane: 9 OpenStax: 7	FOR TUESDAY (WELCOME BACK!): Overview of Sampling Distributions Example Sampling Distribution of the Means Concepts Related to Sampling Distributions FOR THURSDAY: Review, Project work and Assignment A student posted this article to fb and I wanted to share it with you. Pay close attention to the section on "insignificance" and discussion of Type I, II errors as well as power. There will be no quiz on the article, but it sets the stage nicely for work today and power next week. http://www.economist.com/news/briefing/21588057-scientists-think-science-self-correcting-alarming-degree-it-not-trouble BONUS VIDEOS! LUCKY YOU!! Based on questions asked, you may find these helpful for work we will do in class Thursday: Reject or Failing to Reject the Null Hypothesis: I'm still confused! Sampling Distribution Recap Finding Probability for a Score vs. a Mean	10/25 noon Assignment 6 due	
11: 10/28	Review, Power, Introduce t-tests	Assignment 7 Sampling Distributions	9 10 📝 Notes referenced in power	FOR TUESDAY: Review of Hypothesis Testing, Errors and Power overview (10:33) *(Note: this video is to set the stage for power; feel free to skip ahead to the next video if you don't need the review)* Power calculations conceptually (5:39)	Quiz 5 (10/28 11:55pm 11/1 Assignment 7 due	Sakai More Practice: Power Practice Problems Power and Related Concepts Practice Quiz 6 Privitera: Online Quiz

			calculations: Privitera: 8, 9, 10 Lane: 12, 13 OpenStax: 9, 10	Power calculation Example 0 from notes (9:01) Power calculation Example 1 from notes (3:56) FOR THURSDAY: *(Note: These videos are to set the stage for t-tests. Feel free to watch the remaining videos on t-tests listed under next week)* Single Sample t-test Overview (2:22) Related Measures t-test Overview (6:18) Independent Measures t-test Overview (8:20)		
12: 11/4	Independent groups t-test and repeated measures t-test t-tests	t-tests	Notes referenced: Additional notes: Privitera: 8, 9, 10 Lane: 12, 13 OpenStax: 9, 10	FOR TUESDAY : somebody's having a birthday! Single Sample t-test Example (11:16) Problem 1 from notes Related Measures t-test Example (9:31) Independent Measures t-test Example (11:57) FOR THURSDAY: Effect Sizes SPSS Single Sample t test SPSS Paired Samples t test SPSS Independent Samples t test	Quiz 6 (11/4 11:55pm) 11/8 noon Assignment 8 Questions for Review	Sakai More Practice: t test practice t test practice 2 t test output practice Quiz 7 Privitera: Online Quiz NOTE SPSS Screencasts provided by publisher are under chapter 9 and 10 http://www.sagepub.com/priviterastats/study/chapter.htm
13: 11/11	Review and **EXAM 2**	Review/Practice	12	FOR TUESDAY: Review, SPSS, Interpretation	Quiz 7 (11/11 11:55pm)	

				FOR THURSDAY 11/14: **EXAM 2**	11/14 Exam 2 Bring scantron, calculator and pencil (I'll provide tables)	
14: 11/18	ANOVA Single Factor	Data Analysis Project ANOVA	12 13 📝 Supplemental Notes: Single Factor ANOVA Factorial ANOVA	For Tuesday: ANOVA Single Factor Overview (6:20) ANOVA Single Factor Formulas (5:44) ANOVA Single Factor Calculations (8:07) ANOVA Single Factor F-table (5:09) ANOVA Single Factor Example Hypothesis Testing (4:35) **For Thursday** (newly switched): Factorial ANOVA Overview (10:59) Factorial ANOVA Formulas (4:07) Factorial ANOVA Example (11:56) *If you have time you might find this helpful, not necessary for Thursday so move to Tuesday or beyond as needed:* Factorial ANOVA Anticipating Effects (24:12) (Tip: consider printing out "seeing main effects and interaction handout" for this video under Topic Notes and Tables)		ch 12 problems: 4, 5, 6, 14, 16, 20, 22, 23, 28, 32, 34 (consider trying 24 or 26 in SPSS and checking our answers with textbook) ch 13 problems: 2, 4, 6, 12, 14, 16, 18, 20, 26, 30
15: 11/25	Factorial ANOVA, Chi-Square Test, Choosing the right statistics	DAP work time (no Wed recitation)	17	FOR **Tuesday:** ANOVA Single Factor Post Hoc Testing (6:15)	11/29 noon Assignment 9 Poster due for anyone	ch 14 problems: 2, 4, 6, 8, 10, 14, 16, 18, 20, 24, 30, 32, 34 (consider using SPSS for 26 and 28 and comparing your answers to the

	NO THURSDAY MEETING			ANOVA Single Factor Effect Sizes and APA (2:34) Optional Bonus Track: ANOVA Single Factor SPSS (5:25) Optional Bonus Track Factorial ANOVA in SPSS (7:12) BONUS Track ANOVA Calculations Compared *Repeated Measures (Within Subjects) ANOVA* (no calculations on exam, simply know when it is appropriate)	presenting for QEP Expo	solutions)
16: 12/2	Data Analysis Project, Class Wrap-Up (TUESDAY) NO THURSDAY MEETING	Factorial ANOVA Data analysis project		TUESDAY 12/3 3-5pm: QEP expo (details available later)	Quiz 8 (12/2 11:55pm) Wednesday 12/4 11:55pm: Data Analysis Project Due	
12/12	**FINAL EXAM**, 12PM (same room as class)			For more info on the exam schedule please see: https://registrar.unc.edu/academic-calendar/final-examination-schedule-fall/	Thurs 12/12 noon: Final exam (Alt exam time with official excuse form will be on the first reading day 12/5 at noon at university testing center location)	