

## SOC 502 (2) Statistics

*When and where:* TR 9:40am-11am, Horton 307

*Instructor information:* Ezra Temko • ejt2001@wildcats.unh.edu • Office hours: McConnell 338A, T&R 3pm-4pm

*Textbook* (available at Durham Book Exchange): Linneman, Thomas J. 2014. *Social Statistics: Managing Data, Conducting Analyses, Presenting Results* (2E). New York: Routledge.

*Bring to every class:* Textbook, calculator, writing utensil and paper/notebook, nameplate

*Reading research presentation:* 5% of your grade; group project; sign up on MyCourses

*Software issues?* (e.g. SPSS): AT Support Center @ <http://www.unh.edu/it/it-service-desk>, Dimond Library 3<sup>rd</sup> floor

*Late Policy:*

<b>Tardiness</b>	Over 10 minutes	Over one hour	Over one day (24 hrs)	Over two days (48 hrs)	Over one week (168 hours)
<b>Penalty</b>	10 points	20 points	30 points	50 points	100 points

*How to be successful:* Attend class. Participate. Keep up with the readings. Try the exercises. Put in the work. Ask questions. Be honest (this includes academic honesty). Demonstrate kindness and respectful engagement. Monitor MyCourses. Be proactive.

Don't procrastinate, especially for the problem sets and in asking for help / asking questions.

See the syllabus on MyCourses for additional information: <https://mycourses.unh.edu/courses/14014/assignments/syllabus>

### Course Schedule (subject to change)

Date	Class	Topic	Readings
T 8/30	#1	<ul style="list-style-type: none"> <li>Intro to course</li> <li>Utility of Statistics</li> </ul>	
R 9/1	#2	<ul style="list-style-type: none"> <li>Basic concepts</li> <li>Levels of measurement</li> </ul>	<ul style="list-style-type: none"> <li>Syllabus</li> <li>Ch. 1</li> <li>Wright, Bradley. 2008. "Causation." <i>Everyday Sociology</i>. Available URL: <a href="http://nortonbooks.typepad.com/everydaysociology/2008/07/causation.html">http://nortonbooks.typepad.com/everydaysociology/2008/07/causation.html</a></li> </ul>
T 9/6	#3	<ul style="list-style-type: none"> <li>Frequency distributions</li> <li>Crosstabs</li> <li>SPSS</li> </ul>	<ul style="list-style-type: none"> <li>Ch. 2 (Stop when you get to "Tables with Three Variables: Elaboration in Crosstabs")</li> <li>Best, Joel. 2001. "Telling the Truth about Damned Lies and Statistics." <i>Chronicle of Higher Education</i> 47(34):B7. Available via UNH Library at: <a href="http://goo.gl/WPYILN">goo.gl/WPYILN</a></li> </ul>

Date	Class	Topic	Readings and Notes
R 9/8	#4	Elaborated crosstabs	<ul style="list-style-type: none"> <li>Ch. 2 (Read from "Tables with Three Variables: Elaboration in Crosstabs" and stop when you get to "Graphs with One Variable")</li> <li>Goldin, Rebecca. 2015. "Causation vs. Correlation" Stats.org. Available URL: <a href="http://www.stats.org/causation-vs-correlation/">http://www.stats.org/causation-vs-correlation/</a></li> </ul>
T 9/13	#5	<ul style="list-style-type: none"> <li>Graphs</li> <li>SPSS</li> </ul>	<ul style="list-style-type: none"> <li>Ch. 2 (Finish chapter, starting with "Graphs with One Variable")</li> <li>Cherlin, Andrew. 2009. "One Thousand and Forty-Nine Reasons Why It's Hard to Know When a Fact is a Fact." In Cherlin, Andrew, Philip Cowan, Carolyn Cowan, and Linda Burton's "Is That a Fact? Three Brief Reports Prepared for the Council on Contemporary Families." Available URL: <a href="https://contemporaryfamilies.org/why-its-hard-to-know-when-a-fact-is-a-fact/">https://contemporaryfamilies.org/why-its-hard-to-know-when-a-fact-is-a-fact/</a></li> </ul>
R 9/15	#6	<ul style="list-style-type: none"> <li>Central tendency</li> <li>Dispersion</li> </ul>	<ul style="list-style-type: none"> <li>Ch. 3 (Stop when you get to the paragraph beginning "Calculating the variance is straightforward," which is in the section "Assessing Variation among Groups")</li> <li>Go to <a href="http://www.statcan.gc.ca/edu/power-pouvoir/ch12/5214876-eng.htm">http://www.statcan.gc.ca/edu/power-pouvoir/ch12/5214876-eng.htm</a> and read from "Quartiles" on in the section on "Range and Quartiles," as well as the sections "Five-number summaries" and "Constructing box and whisker plots"</li> </ul>
T 9/20	#7	Variation	<ul style="list-style-type: none"> <li>Ch. 3 (Read starting at "Assessing Variation among Groups" and stop when you get to "Variation When There Is No Mean")</li> <li>Sternheimer, Karen. 2015. "The 'Starbucks Effect': Correlation vs. Causation." Everyday Sociology. Available URL: <a href="http://www.everydaysociologyblog.com/2015/04/the-starbucks-effect-correlation-vs-causation.html">http://www.everydaysociologyblog.com/2015/04/the-starbucks-effect-correlation-vs-causation.html</a></li> </ul>
R 9/22	#8	<ul style="list-style-type: none"> <li>Variation</li> <li>Normal Distribution</li> </ul>	<p>Ch. 3 (Finish chapter, starting with "Variation When There Is No Mean")</p> <p>Read Sections A. Introduction, B. History, C. Areas of Normal Distributions at: <a href="http://onlinestatbook.com/2/normal_distribution/normal_distribution.html">http://onlinestatbook.com/2/normal_distribution/normal_distribution.html</a></p>
T 9/27	#9	Chi-square	Ch. 4
R 9/29	#10	Sampling distributions	Ch. 5
T 10/4, 9am		Problem Set #1 due	<i>15% of your grade; covers Introduction through Normal Distribution</i>
T 10/4	#11	Confidence Intervals	
R 10/6	#12	Confidence Intervals	
T 10/11	#13	T-tests	Ch. 6 (Stop when you get to the section "Testing the Differences Among More Than Two Means: ANOVA")
R 10/13	#14	ANOVA	Ch. 6 (Finish chapter, starting with "Testing the Differences Among More Than Two Means: ANOVA")

Date	Class	Topic	Readings
T 10/18	#15	Test #1	<i>10% of your grade; covers Introduction through Normal Distribution</i>
R 10/20	#16	Scatterplots; regression equations; prediction	Ch. 7 (Stop when you get to "Explained Variation")
F 10/21, 9am		Problem Set #2 due	<i>10% of your grade; covers Chi-square through ANOVA</i>
T 10/25	#17	Correlation coefficient; coefficient of determination	Ch. 7 (Finish chapter, starting with "Explained Variation")
R 10/27	#18	Linear Regression	Ch. 8
T 11/1	#19	Reference variables	Ch. 9
R 11/3	#20	Multiple regression	Read <a href="https://statistics.laerd.com/spss-tutorials/multiple-regression-using-spss-statistics.php">https://statistics.laerd.com/spss-tutorials/multiple-regression-using-spss-statistics.php</a>
T 11/8	#21	Multiple regression	Ch. 10
R 11/10	#22	Test #2	<i>10% of your grade; covers Chi-square through ANOVA</i>
T 11/15	#23	Beta coefficients	Ch. 11
W 11/16, 9am		Problem Set #3 due	<i>10% of your grade; covers regression</i>
R 11/17	#24	Interactions	Ch. 12
T 11/22		No Class (UNH classes follows Friday schedule)	
R 11/24		No Class (Thanksgiving)	
T 11/29	#25	<ul style="list-style-type: none"> <li>Logistic regression</li> <li>Odds ratios</li> </ul>	Ch. 13
R 12/1	#26	Test #3	<i>10% of your grade; covers regression</i>
T 12/6	#27	Review/Synthesis	
R 12/8	#28	Review/Synthesis	
F 12/9, 9am		Problem Set #4 due	<i>5% of your grade; covers advanced topics</i>
T 12/13, 10:30am – 12:30pm		Final exam	<i>Part #1: 5% of your grade; covers advanced topics (Module 4)</i> <i>Part #2: 20% of your grade; cumulative – Modules 1-3</i>