Instructor/TA Info

Instructor Information

Name: Ross Larsen Office Location: 150-F MCKB Office Phone: 801-422-2637 Email: Ross.Larsen@byu.edu

Name: Shiloh Howland Email: shiloh.howland@gmail.com

TA Information

Name: Susanna Fullmer Office Location: MCKB Email: susannatfullmer@gmail.com

Course Information

Description

IP&T/CPSE/745 will provide a thorough exposure and application of multiple regression analysis which is the foundation for a wide variety of subsequent statistical procedures including path analysis, factor analysis, structural equation modeling, and hierarchical linear modeling.

Prerequisites

IP&T 651/CPSE 651 or equivalent.

Materials

No materials

Learning Outcomes

Conceptual understanding and practice application of statistics

Focusing more on concepts than computation will allow us to cover more ground with more practice of each concept. By integrating the course with training in SPSS, students will be prepared to select and execute appropriate analytical strategies in their applied research and practice.

Demonstrate fluency

- · All students will demonstrate fluency in SPSS commands and functions.
- · All students will demonstrate fluency in interpreting SPSS output files.
- All students will demonstrate fluency in selecting the appropriate statistical analysis based on the research questions and the nature of the data.
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Demonstrate fluency

All Students will demonstrate the ability to analyze, understand, and critique multiple regression in a journal article.

Grading Scale

Grades	Percent
A	93%
A-	90%
B+	87%
В	83%
B-	80%
C+	77%
С	73%
C-	70%
D+	67%
D	63%

D-	60%
E	0%
Т	0%

Assignments

Assignment Descriptions

Week 1 in-class practice



Dummy coding practice

One Minute Paper 1

Jan 06 Due: Monday, Jan 06 at 11:59 pm

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 1 - Homework

Jan 13	Due: Monday, Jan 13 at 11:59 am
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Week 1 - Homework

Week 2 Quiz

Jan	
13	Due: Monday, Jan 13 at 2:30 pm

This will be held in class. There is a 30 minute time limit.

P-value Quiz 1

Jan 13 Due: Monday, Jan 13 at 11:59 pm

1) Memorize and prepare to write down in class the definition of a p-value.

Week 2 in-class practice A

Jan 13 Due: Monday, Jan 13 at 11:59 pm

Centering of continuous variables

Sample Standard Deviation Quiz 1

Jan 13 Due: Monday, Jan 13 at 11:59 pm

1) Memorize and prepare to write down in Class the Sample Standard Deviation.

2) Prepare to do a sample standard deviation on a very small dataset by hand.

Week 2 in-class practice B

Jan 13

Due: Monday, Jan 13 at 11:59 pm

Interaction terms with centered continuous variables and dummy variables

One Minute Paper 2

Jan 13 Due: Monday, Jan 13 at 11:59 pm

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 2 - Homework

Jan	
27	Due: Monday, Jan 27 at 11:59 am

Week 2 - Homework

Week 3 Quiz

27

Jan 27	Due: Monday, Jan 27 at 2:30 pm	
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This will be held in class. There is a 30 minute time limit.

Reading Accountability Quiz 1

Jan Due: Monday, Jan 27 at 3:00 pm

This Quiz will assess your readings up to this point. You should have read the following before today: Keith Preface; Keith Appendix B; Keith 6; Keith 1-3; and Keith 9

One Minute Paper 3

Jan	
27	Due: Monday, Jan 27 at 11:59 pm

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 3 in-class practice

Jan Due: Monday, Jan 27 at 11:59 pm 27

Week 3 - Homework

Feb Due: Monday, Feb 03 at 11:59 am 03

Week 3 - Homework

Week 4 Quiz

Feb 03

Due: Monday, Feb 03 at 2:30 pm

This quiz will be take in-class. You will have 30 minutes to complete it.

Formative Quiz (three types of regression)

Feb Due: Monday, Feb 03 at 3:00 pm 03

To help you in understanding the three types of regression

Reading Accountability Quiz 2

Feb Due: Monday, Feb 03 at 3:00 pm 03

This Quiz will assess your readings up to this point. You should have read the following at least once before today: Keith Preface; Keith Appendix B; Keith 6; Keith 1-3; Keith 9; Keith 5 and Keith 4.

Week 4 in-class practice

Feb Due: Monday, Feb 03 at 11:59 pm 03

Data Gathering Assignment

Feb Due: Monday, Feb 03 at 11:59 pm 03

Report back whether you have a dataset (including a continuous dependent variable, and at least two independent variables) through either (a) any NCES dataset (e.g., ECLS-K, NELS), (b) data you have gathered yourself, or (c) data you have access to.

One Minute Paper 4

Feb Due: Monday, Feb 03 at 11:59 pm 03

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 4 - Homework

Feb Due: Monday, Feb 10 at 11:59 am 10

Week 4 - Homework

Week 5 Quiz

Feb	
10	Due: Monday, Feb 10 at 2:50 pm

Day 5 - Quiz. This will be taken in class and there is a 30 minute time limit.

Reading Accountability Quiz 3

Feb Due: Monday, Feb 10 at 3:00 pm 10

Have you read Keith 5 before today?

Week 5 in class practice

Feb Due: Monday, Feb 10 at 11:59 pm 10

One Minute Paper 5

Feb Due: Monday, Feb 10 at 11:59 pm 10

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 5 - Homework

Feb Due: Tuesday, Feb 18 at 11:59 am 18

Day 5 - Homework

Week 6 Quiz

Feb Due: Tuesday, Feb 18 at 2:30 pm 18

Day 6 - Quiz. This will be taken in class and there is a 30 minute time limit.

Week 6b in class practice

Feb Due: Tuesday, Feb 18 at 11:59 pm 18

One Minute Paper 6

Feb Due: Tuesday, Feb 18 at 11:59 pm 18

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 6a in class practice

Feb18Due: Tuesday, Feb 18 at 11:59 pm

Week 6 - Homework

Feb	
24	Due: Monday, Feb 24 at 11:59 am

Even if you don't see violations of equality of variance in the scatterplots, practice doing the Keith method (https://docs.google.com/document/d/1MD10E7OMVFneVLkauKfJaSwXgo8Z4kfy8r8z_IE4sL0/edit?usp=sharing) so that you can do it during the quiz next week. It's time-consuming so practicing it over and over will help the quiz go better next week.

Week 7 Quiz

F	eb	b		
2	4	Due: Monday, Feb 24 at 2:30 pm		

Week 7 - Quiz. This will be taken in class and there is a 30 minute time limit.

Reading Accountability Quiz 4

 Feb
 Due: Monday, Feb 24 at 3:00 pm

This Quiz will assess your readings up to this point. You should have read the following before today: Keith Preface; Keith Appendix B; Keith 6; Keith 1-3; Keith 9; Keith 4; and Keith 7 & 8.

P-value Quiz 2

 Feb
 Due: Monday, Feb 24 at 11:59 pm

One Minute Paper 7

Feb	
24	Due: Monday, Feb 24 at 11:59 pm

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Beta Quiz

Feb

Feb 24 Due: Monday, Feb 24 at 11:59 pm

Sample Standard Deviation Quiz 2

 Feb
 Due: Monday, Feb 24 at 11:59 pm

Week 7 in class practice

24	Due: Monday, Feb 24 at 11:59 pm
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Graphing nominal by continuous interactions

Week 7 - Homework

Mar Due: Monday, Mar 02 at 11:59 am

Graphing interactions: nominal by continuous

Week 8 Quiz

Mar	
02	Due: Monday, Mar 02 at 1:05 pm

This quiz will be taken in-class on Monday, March 2.

For this quiz, you will submit your Excel spreadsheet to Learning Suite.

Using this <u>dataset (https://www.dropbox.com/s/7ktk1hfmit97x7p/ATLsubset.sav?dl=0</u>), you want to explain teacher perceptions of a student's approach to learning in 4th grade (T4LEARN) using:

- 1. Male
- 2. Parent perceptions of a student's approach to learning in 2nd grade (P2LEARN)
- 3. An interaction term created between Male and Parent perceptions of a student's approach to learning in 2nd grade (insert this term in a second block)

Center any independent, continuous variables.

Run the regression with the three variables. In Excel, write the regression equation and graph the interaction.

Upload the Excel file with the Coefficients table, your regression equation, and your interaction graph.

Beta Naught (B0) and Regression Quiz

Mar Due: Monday, Mar 02 at 2:50 pm

Be prepared to interpret what B_0 (y-intercept or constant) means in a regression equation (i.e. when the [independent variables are 0], the predicted [dependent variables] is B_0 .

Also be prepared to take output and turn it into a regression equation (i.e. Dependent Variable = Y-intercept+Slope(Independent Var))

Week 8 in class practice

Mar 02

Mar

Due: Monday, Mar 02 at 11:59 pm

One Minute Paper 8

02 Due: Monday, Mar 02 at 11:59 pm

Write one thing you learned from class today.

Write one thing you are still confused from class today.

Your writing will be shared with all at the beginning of the next class period.

Week 8 - Homework

Mar 09 Due: Monday, Mar 09 at 11:59 am

Graphing interactions: continuous by continuous and nominal by nominal

Week 9 Quiz

Mar 09 Due: Monday, Mar 09 at 2:30 pm

This quiz will be taken in-class on Monday, March 9.

For this quiz, you will submit your Excel spreadsheets. You can upload separate spreadsheets for each problem OR submit them in the same spreadsheet. This assignment will accept multiple file uploads.

Problem #1

Using this dataset (https://www.dropbox.com/s/8ii8mz8727q8kuz/Wk9fesjQ1.sav?dl=0), you want to explain scores on the FESJ assessment using:

- 1. Male
- 2. International status
- 3. An interaction term created between Male and International status (insert this term in a second block)

Run the regression with the three variables. In Excel, write the regression equation and **graph** the interaction. Upload the Excel file with the Coefficients table, your regression equation, and your interaction graph.

Problem #2

Using this dataset (https://www.dropbox.com/s/hzqysh6ccbilhli/Wk9q2.sav?dl=0), you want to explain scores on the MD assessment using:

- 1. Scores on the MA assessment
- 2. Scores on the FESJ assessment
- 3. An interaction term created between the MA score and the FESJ score (insert this term in a second block)

Center any independent, continuous variables.

Run the regression with the three variables. In Excel, write the regression equation and **graph** the interaction. Upload the Excel file with the Coefficients table, your regression equation, and your interaction graph.

Article Review

Mar 09

Due: Monday, Mar 09 at 11:59 pm

Find an article in your field that uses Multiple Regression.

Prepare 5 Powerpoint slides in APA that you will present to class.

Slide 1: Title page with your name, and the reference to the article

Slide 2: Brief description of the theory of the article (why is the article interesting)

Slide 3: Discuss the assumptions of multiple regression and whether they are met in the article.

Slide 4: Show the table the authors provided that show the Multiple Regression results. Be prepared to interpret the results in context.

Slide 5: A brief discussion on the practical significance of the article and whether you are confident in the authors inferences. State the strengths and weaknesses of the article.

Individual Project

Apr 06

Due: Monday, Apr 06 at 11:59 pm

Find a secondary dataset (preferably in your field)

Analyze your dataset using SPSS or program of your choice.

Include a continuous outcome.

Include at least two Independent Variables.

Include at least One Interaction

Create a Powerpoint in APA style that includes up to 20 slides. You will present these results in class and answer questions during your presentation.

Below is a suggested slide composition:

Slide 1: Title page, include your name and the name of your project

Slide 2: Briefly describe the theoretical backdrop of your problem (why is your problem interesting?)

Slides 3-5: Show Raw Descriptives (Mean, Minimum, Maximum, Standard Deviation) of all your variables (excluding the interaction), a Histogram of your outcome variable and a bivariate correlation table of your variables after you have prepared the data (including the interaction)

Slides 6-9: Assumptions: Show your Residual plot, histogram of your residuals, Variance Inflation Factors, and discuss any potential outliers. (this may take more slides than 1).

Slide 10: Show a table of your output including, R-squared, Betas, Standardized Betas, Standard errors and p-values. Interpret your output in context.

Slide 11: Have a graph of your interaction whether it is significant or not. Be prepared to discuss.

Slide 12: Brief discussion on the significant of your results.

Submit to Learning Suite:

Your Slides

Your Data

Your Syntax

Your Output.

Final Exam Part I

Apr 22 Due: Wednesday, Apr 22 at 11:59 pm

The final exam part one. This part of the final covers the procedural tasks you should have learned in the class. The final exam will consist of three parts: (1) Procedural Fill in the blank (2) A miniproject (3) Conceptual opened questions This is an open book, closed neighbor exam.

Final Exam Part III

Apr 22 Due: Wednesday, Apr 22 at 11:59 pm

The final exam will consist of three parts: (1) Procedural Fill in the blank (2) A miniproject (3) Conceptual opened questions This is an open book, closed neighbor exam.

Final Exam Part II Ends

Apr 22

Due: Wednesday, Apr 22 at 11:59 pm

This is open-book, open-note (closed-neighbor).

Dr. Tolman has been studying factors related to happiness and has requested you run the analysis.

There are six variables that he has gathered data on for each participant: Wealth, Religiosity, Openness to Experience, Gender, Age, and Family Size.

He has reason to believe that there is a potential interaction between Family size and wealth, religiosity and family size, religiosity and openness to experience, Openness to experience and Gender, Gender and Age, and Gender and family size.

You are to turn in either a paper report or a slide show presentation that summarizes and justifies your conclusions, and shows clearly your work and thought process.

You will be graded primarily on the quality and clarity of your thought process, but the accuracy of your answer will also be taken into account.

https://docs.google.com/spreadsheets/d/1hYCGcrh-htm31I5wPDEqzylkfNqrtOGS6NmF75mcdfY/edit?usp=sharing

Point Breakdown

Categories	Percent of Grade
Final Exam	20%
Projects	25%
Analysis Quizzes	10%
Homework	20%
Conceptual Quizzes	5%
In Class Practice	10%
Article Review	10%

University Policies

Honor Code

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

Preventing Sexual Misconduct

In accordance with Title IX of the Education Amendments of 1972, Brigham Young University prohibits unlawful sex discrimination against any participant in its education programs or activities. The university also prohibits sexual harassment-including sexual violence-committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by the university.

University policy requires all university employees in a teaching, managerial, or supervisory role to report all incidents of Sexual Misconduct that come to their attention in any way, including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of Sexual Misconduct should be reported to the Title IX Coordinator at <u>t9coordinator@byu.edu</u> or (801) 422-8692. Reports may also be submitted through EthicsPoint at <u>https://titleix.byu.edu/report (https://titleix.byu.edu/report)</u> or 1-888-238-1062 (24-hours a day).

BYU offers confidential resources for those affected by Sexual Misconduct, including the university's Victim Advocate, as well as a number of nonconfidential resources and services that may be helpful. Additional information about Title IX, the university's Sexual Misconduct Policy, reporting requirements, and resources can be found at <u>http://titleix.byu.edu (http://titleix.byu.edu)</u> or by contacting the university's Title IX Coordinator.

Student Disability

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. A disability is a physical or mental impairment that substantially limits one or more major life activities. Whether an impairment is substantially limiting depends on its nature and severity, its duration or expected duration, and its permanent or expected permanent or long-term impact. Examples include vision or hearing impairments, physical disabilities, chronic illnesses, emotional disorders (e.g., depression, anxiety), learning disorders, and attention disorders (e.g., ADHD). If you have a disability which impairs your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 801-422-2767 to request a reasonable accommodation. The UAC can also assess students for learning, attention, and emotional concerns. If you feel you have been unlawfully discriminated against on the basis of disability, please contact the Equal Employment Office at 801-422-5895, D-285 ASB for help.

Schedule

Date	Column 1	Column 2
Week 1		

M Jan 06 Monday	Introduction	Keith Preface; Keith Appendix B; Keith 6
	Devotional	Devotional
	Class Overview <u>Slides</u>	One Minute Paper 1 Week 1 - Homework Opens
	Remote Access SPSS	
	Instructions on how to access SPSS through the remote server.docx <u>Download</u>	
	Accessing Citrix and using Kumo	
	 Accessing <u>Citrix</u> to use SPSS and Mplus (Note: There are two methods - web browser or desktop) Connect cloud storage (Google Drive, Box, Dropbox, etc.) to Citrix via <u>Kumo</u> 	
	Decision Based Learning (DBL) diagram	
	DBL Diagram and Links Final.pdf <u>Download</u> Active Website for DBL:	
	https://dbl.byu.edu/	
	Conceptual:	
	 Definition of p-value.pdf <u>Download</u> <u>Sample Standard Deviation</u> 	
	Procedural:	
	 <u>How to Dummy Code a categorical variable</u> Center and Dummy Variables (why).docx <u>Download</u> 	
	Conditional:	
	Use DBL for in-class practice assignment #1	
	Start looking for an individual dataset:	
	 <u>Distant Learning Dataset Training (DLDT)</u> <u>Education Data Analysis Tool (EDAT)</u> <u>EDAT User's Guide</u> <u>https://www.data.gov/</u> 	
	Week 1 in-class practice	
Week 2		

M Jan 13 Monday	DBL diagram updated	Keith 1-3; Keith 9
	DBL Diagram and Links.pdf Download	Reading Accountability Quiz 3 Opens
		Devotional Shandon (Careful vs. Casual)
	<u>One minute paper #1</u>	Week 1 - Homework Closes Week 2 Quiz
	Type 1 and Type 2 Error Definitions.docx <u>Download</u>	P-value Quiz 1 Sample Standard Deviation Quiz 1
	Dummy Variables (why).docx <u>Download</u>	Reading Accountability Quiz 4 Opens Week 2 - Homework Opens Data Gathering Assignment Opens
	How to interpret your Dummy Variable Coefficients in	One Minute Paper 2
	Multiple Regression.	Reading Accountability Quiz 1 Opens Reading Accountability Quiz 2 Opens
	Regression Assumptions.docx Download	
	Procedural:	
	<u>Center the Continuous IVs</u>	
	<u>Create Interaction Terms</u>	
	Datasets for class	
	n=1000,stud & par_3.sav Download	
	Week 2 in-class practice A Week 2 in-class practice B	
Week 3		
M Jan 20 Monday	Martin Luther King Jr Day	
Week 4		
M Jan 27 Monday	One minute paper	Keith 5
	<u>One minute paper</u>	Devotional Alicia (Careful vs. Casual)
	You may be able to download SPSS to your own computer - go to <u>software.byu.edu</u> and look for SPSS on the left side.	One Minute Paper 3 Reading Accountability Quiz 1 Closes
	V26 is the current edition.	Week 2 - Homework Closes Week 3 Quiz
	Procedural:	Week 3 - Homework Opens
	 Simultaneous Sequential Hierarchical, Combination of Sequential Hierarchical and Model 	
	Selection	
	Model Selection Techniques	
	Week 3 in-class practice	
Week 5		

M Feb 03 Monday	 <u>One minute paper #3</u> <u>Silly gimmick</u> Procedural: <u>Linearity Assumption</u> <u>Squared term</u> <u>Transformation</u> My favorite Transformation handout <u>Curve Estimation Video</u> Curvilinear dataset of Grade Anxiety and Hours of Homework.sav <u>Download</u> Life of Light Bulbs.sav <u>Download</u> Week 4 in-class practice	Keith 4; Keith 9 Devotional Christina (Careful vs. Casual) Formative Quiz (three types of regression) Week 3 - Homework Closes Week 4 Quiz Week 4 - Homework Opens Data Gathering Assignment Closes One Minute Paper 4 Reading Accountability Quiz 2 Closes
Week 6		
M Feb 10 Monday	One minute paper Procedural: • Assumption: Independence. • Assumption: Normality. • Normality: Transformation • Outliers Conceptual: • Central Limit Theorem CLT Example.sav Download CLT Simulation Simple Code.sps Download Google Sheets Simulation Study. Sampling distribution of the mean animation Geometric means Independence Assumption Week 5 in class practice	Keith 5 Keith (p.195-200); Devotional Rory (Careful vs. Casual) Week 4 - Homework Closes Week 5 Quiz Week 5 - Homework Opens Reading Accountability Quiz 3 Closes One Minute Paper 5
Week 7		
M Feb 17 Monday	Presidents Day	
T Feb 18 Tuesday	Monday Instruction One minute paper Updated Variance Video: https://youtu.be/rxztCJJrxpA Lack of multicollinearity: https://www.youtube.com/watch?v=XRNPJTi3kT0 Video showing how log transformation of the dependent variable can fix a violation of equality of variances. Week 6a in class practice Week 6b in class practice	Keith 7 Devotional Nate (Careful vs. Casual) Week 5 - Homework Closes Week 6 Quiz Week 6 - Homework Opens One Minute Paper 6

Week 8		
M Feb 24 Monday Week 9 M Mar 02 Monday	One Minute paper #6 Resource for interpreting betas when transformations have occured. Procedure: Graphing interactions • Nominal*Continuous • Step by step guide (nominal by continuous) Week 7 in class practice Procedure: One minute paper #8 Graphing Interactions • Nominal*Nominal • Step by step guide (nominal by nominal)	Keith 7; Keith 8 Devotional Chris (Careful vs. Casual) One Minute Paper 7 Week 6 - Homework Closes Week 7 Quiz P-value Quiz 2 Sample Standard Deviation Quiz 2 Beta Quiz Reading Accountability Quiz 4 Closes Week 7 - Homework Opens Devotional Rachel (Careful vs. Casual) One Minute Paper 8 Week 7 - Homework Closes Week 8 Quiz Week 8 - Homework Opens Beta Naught (B0) and Regression Quiz
	 <u>Continuous*Continuous</u> Step by step <u>guide</u> (continuous by continuous) Week 8 in class practice 	
Week 10		
M Mar 09 Monday	Student Article Presentations <u>One minute paper #9</u> Concepts: Example of Individual Article Presentation • Aktekin_et_al-2001-Medical_Education.pdf <u>Download</u> • WWC_FAQ.pdf <u>Download</u> • 2017_03_01_Ross Larsen example article.pptx <u>Download</u>	Devotional Cecil (Careful vs. Casual) Article Review Week 8 - Homework Closes Week 9 Quiz
Week 11		
M Mar 16 Monday	Student Article Presentations Final Exam Part I Opens Final Exam Part III Opens	Devotional Susanna (Careful vs. Casual)
Week 12		
M Mar 23 Monday	 Student Article Presentations Student Final Project Presentations Example of Individual Final Project Presentation Ross Example Project Dataset.sav <u>Download</u> 2017_03_01 Example Project first couple slides.pptx <u>Download</u> 2017_03_01 Example Project Complete.pptx <u>Download</u> Example Syntax.sps <u>Download</u> Example Output.spv <u>Download</u> 	Devotional Duane (Careful vs. Casual)
Week 13		
M Mar 30 Monday	Student Final Project Presentations	Devotional Jessie (Careful vs. Casual)

M Apr 06 Monday	Student Final Project Presentations	Devotional Ester (Careful vs. Casual) Individual Project	
Week 15			
M Apr 13 Monday	Student Final Project Presentations Free trial of <u>SPSS</u> to use through the end of semester (so you're not having to rely on Citrix)	Devotional Sami (Careful vs. Casual)	
Week 16			
T Apr 21 Tuesday	Final Exam meeting time 2:30-5:30pm in ZOOM for remaining student final project presentations.		
W Apr 22 Wednesday	Final Exam Part I Closes Final Exam Part II Ends Final Exam Part III Closes		