

Instructor/TA Info

Instructor Information

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Course Information

Description

Course Purpose

The purpose of this course is to help you become better discerners and producers of truth claims using multiple-linear regression and at the same time assist you in developing a deeper trust in your Heavenly Father as you partner with Him to gain the skills you will need to serve others, overcome life's challenges, and build His kingdom now and in the future.

Learning Outcomes

Conceptual Understanding

Students will explain conceptual reasoning that support regression interpretations

Demonstrate fluency

Students will demonstrate fluency in selecting the appropriate regression method based on the nature of the research question, running the method in SPSS, and interpreting the results.

Grading Scale

Grades	Percent
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
E	0%
T	0%

Assignments

Assignment Descriptions

Ch 1 - Quiz

**Jan
22**Due: Monday, Jan 22 at 1:00 pm

Ch 1 Practice

**Jan
22**Due: Monday, Jan 22 at 1:00 pm

Ch 2-3 Practice

**Jan
29**Due: Monday, Jan 29 at 1:00 pm

Ch 4 Practice

**Feb
05**Due: Monday, Feb 05 at 1:00 pm

Ch 2-3 Quiz

**Feb
05**Due: Monday, Feb 05 at 3:50 pm

Midterm Exam (Ch 1-5)

**Feb
22**Due: Thursday, Feb 22 at 3:50 pm

Midterm Gap Analysis Exam (Ch 1-5)

**Feb
26**Due: Monday, Feb 26 at 1:00 pm

Ch 5 Quiz

**Feb
26**Due: Monday, Feb 26 at 1:00 pm

Ch 5 - Practice

**Feb
26**Due: Monday, Feb 26 at 1:00 pm

Ch 4 Quiz

**Feb
26**Due: Monday, Feb 26 at 3:50 pm

Ch 6 - Quiz

Mar

04

Due: Monday, Mar 04 at 1:00 pm

Ch 6 - Practice**Mar
04**

Due: Monday, Mar 04 at 1:00 pm

Midcourse Project**Mar
11**

Due: Monday, Mar 11 at 1:00 pm

Work on Mid-Course Project

Two options:

(A) Generative AI Multiple-Linear Regression Project

Instructions:

Midcourse Project (Generative AI Option).docx [Download \(plugins/Upload/fileDownload.php?fileId=164e03f5-zzIE-pJpo-URe5-](#)[MC371d1eb2f1&pubhash=GOOxAgT4HdMr4IPM0wTEzco_f11KeagDxRrzR29SjT76Hytdn35ASAsc2NpGRqP6DnGt9p358yB](#)**(B) Locating Multiple-linear Regression Studies in the Journal Articles Project**

Instructions

Midcourse Project (Literature Option).docx [Download \(plugins/Upload/fileDownload.php?fileId=daa36c15-wWd6-6xNb-dLpC-o2754e7170b5&pubhash=-](#)[BIZ6rdjm_4O4wr6RAa54D9lwYdPcCZFHjdKHmQ914eTsJubvbQHECeytoG1TdCKd5kw09MwqtvMMY5mlbTTAw==\)](#)**Ch 7 - Practice****Mar
18**

Due: Monday, Mar 18 at 1:00 pm

Ch 7 - Quiz**Mar
18**

Due: Monday, Mar 18 at 1:00 pm

Ch 8 - Practice**Mar
25**

Due: Monday, Mar 25 at 1:00 pm

Ch 8 Quiz**Mar
25**

Due: Monday, Mar 25 at 3:50 pm

Ch 10 - Practice**Apr
01**

Due: Monday, Apr 01 at 1:00 pm

Ch 10 Quiz**Apr
08**

Due: Monday, Apr 08 at 3:50 pm

Ch 6 - Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 1:00 pm

Ch 5 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 1:00 pm

Final Exam Gap Analysis

**Apr
15**Due: Monday, Apr 15 at 1:00 pm

Ch 7 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 1:00 pm

Ch 10 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 11:59 pm

Ch 1 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 11:59 pm

Ch 8 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 11:59 pm

Ch 4 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 11:59 pm

Ch 2-3 Ungraded Extra Practice

**Apr
15**Due: Monday, Apr 15 at 11:59 pm

Final Exam

**Apr
22**Due: Monday, Apr 22 at 3:50 pm

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

The health and well-being of students is of paramount importance at Brigham Young University. If you or someone you know has experienced sexual harassment (including sexual violence), there are many resources available for assistance.

In accordance with Title IX of the Education Amendments of 1972, BYU prohibits unlawful sex discrimination, including sexual harassment, against any participant in its education programs or activities. The university also prohibits sexual harassment by its personnel and students. Sexual harassment occurs when

- a person is subjected to unwelcome sexual speech or conduct so severe, pervasive, and offensive that it effectively denies their ability to access any BYU education program or activity;
- any aid, benefit, or service of BYU is conditioned on a person's participation in unwelcome sexual conduct; or
- a person suffers sexual assault, dating violence, domestic violence, or stalking on the basis of sex.

University policy requires all faculty members to promptly report incidents of sexual harassment that come to their attention in any way, including through face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of sexual harassment should be reported to the Title IX Coordinator at t9coordinator@byu.edu or (801) 422-8692 or 1085 WSC. Reports may also be submitted online at <https://titleix.byu.edu/report> (<https://titleix.byu.edu/report>) or 1-888-238-1062 (24-hours a day).

BYU offers confidential resources for those affected by sexual harassment, including the university's Sexual Assault Survivor Advocate, as well as a number of non-confidential resources and services that may be helpful. Additional information about Title IX, the university's Sexual Harassment Policy, reporting requirements, and resources can be found at <http://titleix.byu.edu> (<http://titleix.byu.edu>) 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 Opportunity Office at 801-422-5895, eo_manager@byu.edu, or visit <https://hrs.byu.edu/equal-opportunity> (<https://hrs.byu.edu/equal-opportunity>) for help.

Schedule

Date	Topic	Reading Assignment	Practice Assignments / Exams	Ungraded Practice	Quizzes
Week 1					

M Jan 08 Monday	Start of Classes Single Linear Regression (One predictor scaled / one predicted scaled variables)	Practice Preparation: Download and become familiar with following documents in preparation for the practice assignment and quiz: <ul style="list-style-type: none"> Chapter 1 How to Run Method.docx Download Chapter 1 How to Interpret Results with Conceptual Explanation.docx Download Chapter 1 How to Interpret Results (Summary).docx Download 	Ch 1 Practice Opens	Ch 1 Ungraded Extra Practice Opens	Ch 1 - Quiz Opens
Week 2					
M Jan 15 Monday	Martin Luther King Jr Day				
Week 3					
M Jan 22 Monday	Multiple Linear Regression (Two predictor scaled / one predicted scaled variables)	Read Keith Book Ch 2-3 by this date Practice Preparation: Download and become familiar with following documents in preparation for the practice assignment and quiz: <ul style="list-style-type: none"> Chapter 2-3 How to Run Method.docx Download Chapter 2-3 How to Interpret Results with Conceptual Explanation.docx Download Chapter 2-3 How to Interpret Results (Summary).docx Download 	Ch 1 Practice Closes Ch 2-3 Practice Opens	Ch 2-3 Ungraded Extra Practice Opens	Ch 1 - Quiz Closes Ch 2-3 Quiz Opens
T Jan 23 Tuesday				Ch 4 Ungraded Extra Practice Opens	
W Jan 24 Wednesday				Ch 5 Ungraded Extra Practice Opens	
Th Jan 25 Thursday				Ch 6 - Ungraded Extra Practice Opens	

				Opens	
F Jan 26 Friday				Ch 7 Ungraded Extra Practice Opens	
Sa Jan 27 Saturday				Ch 8 Ungraded Extra Practice Opens	
Week 4					
M Jan 29 Monday	Multiple Linear Regression (Three predictor scaled / one predicted scaled variables)	Read Keith Book Ch 4 by this date Practice Preparation (same as previous week) <ul style="list-style-type: none"> Chapter 4 How to Run Method.docx Download Chapter 4 How to Interpret Results with Conceptual Explanation.docx Download Chapter 4 How to Interpret Results (Summary).docx Download 	Ch 2-3 Practice Closes Ch 4 Practice Opens	Ch 10 Ungraded Extra Practice Opens	Ch 4 Quiz Opens
Week 5					
M Feb 05 Monday	Multiple Linear Regression (Simultaneous, sequential, step-wise methods)	Read Keith Book Ch 5 by this date <ul style="list-style-type: none"> Chapter 5 - How to run simultaneous, sequential, stepwise.pdf Download Chapter 5 - How to interpret simultaneous, sequential, stepwise.pdf Download 	Ch 4 Practice Closes Ch 5 - Practice Opens		Ch 2-3 Quiz Closes Ch 5 Quiz Opens
Week 6					
M Feb 12 Monday	Gap Analysis		Midterm Gap Analysis Exam (Ch 1-5) Opens		
Week 7					
M Feb 19 Monday	Presidents Day		Midterm Exam (Ch 1-5) Opens		
T Feb 20 Tuesday	Monday Instruction Midterm				

Th Feb 22 Thursday			Midterm Exam (Ch 1-5) Closes	
Week 8				
M Feb 26 Monday	Multiple Linear Regression (Only categorical predictor / one scaled predicted variables)	Read Keith Book Ch 6 by this date	Ch 5 - Practice Closes Midterm Gap Analysis Exam (Ch 1-5) Closes Ch 6 - Practice Opens	Ch 5 Quiz Closes Ch 4 Quiz Closes Ch 6 - Quiz Opens
Week 9				
M Mar 04 Monday	Project	Project	Ch 6 - Practice Closes Work on Mid-Course Project (Due on next class)	Ch 6 - Quiz Closes
Week 10				
M Mar 11 Monday	Multiple Linear Regression (Mixed categorical / scaled predictor and one predicted scaled variables)	Read Keith Book Ch 7 by this date	Midcourse Project Ch 7 - Practice Opens	Ch 7 - Quiz Opens
Week 11				
M Mar 18 Monday	Multiple Linear Regression (Interactions and Curves)	Ch8 Run & Interpret Instructions.docx Download Read Keith Book Ch 8 by this date	Ch 7 - Practice Closes Ch 8 - Practice Opens	Ch 7 - Quiz Closes Ch 8 Quiz Opens
Week 12				
M Mar 25 Monday	Assumptions	Read Keith Book Ch 10 by this date	Ch 8 - Practice Closes Ch 10 - Practice Opens	Ch 8 Quiz Closes Ch 10 Quiz Opens
Week 13				

M Apr 01 Monday	Path Analysis	Read Keith Book Ch 12-13 by this date	Ch 10 - Practice Closes		
Week 14					
M Apr 08 Monday	Final Gap Analysis		Final Exam Gap Analysis Opens		Ch 10 Quiz Closes
T Apr 09 Tuesday			Final Exam Opens		
Week 15					
M Apr 15 Monday	Final Exam		Final Exam Gap Analysis Closes	Ch 1 Ungraded Extra Practice Closes Ch 2-3 Ungraded Extra Practice Closes Ch 4 Ungraded Extra Practice Closes Ch 5 Ungraded Extra Practice Closes Ch 6 - Ungraded Extra Practice Closes Ch 7 Ungraded Extra Practice Closes Ch 8 Ungraded Extra Practice Closes Ch 10 Ungraded Extra Practice Closes	
W Apr 17 Wednesday	Last Day of Class				

Th Apr 18 Thursday	Exam Preparation Day				
F Apr 19 Friday	Final Exam Day				
Week 16					
M Apr 22 Monday	Final Exam Day	Final Exam: 382 BRMB 11:00am - 2:00pm	Final Exam Closes		