

Professor: Dr. Thomas Fisher

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Office Hours: TuTh 1:00-1:30 (dedicated for this class)
TuTh 9:30-10:30 (general office hours)
By appointment

Personal Website: <http://www.users.miamioh.edu/fishert4/>
and Canvas site

Class Materials: Notebook, textbook and/or laptop

Textbook: Introduction to Statistics Modeling Using R by Michael Hughes (available on canvas site and a printed copy is available at Oxford Copy Shop.

IMPORTANT NOTE -- Michael Hughes and I are in the process of updating and rewriting the lecture note workbook. The language of R has evolved since he first wrote the book. Throughout the class I will be posting updated material to the canvas site. This summer we intend on a major rewrite and design of the course.

References: An R Companion to Linear Statistical Models, Hay-Jahans.
Practicing Statistics: Guided Investigations for the Second Course, Kuiper & Sklar
Using R for Introductory Statistics, Verzani
The R Book by Crawley
www.datacamp.com
www.youtube.com -- Can search for R or RStudio help

Software: In this course we will be utilizing R and RStudio extensively. You can download both pieces of software for free from:
<http://cran.r-project.org/>
<http://www.rstudio.com/>

Bulletin Applications of statistics using regression and design of experiments techniques.

Description: Regression topics include simple linear regression, correlation, multiple regression and selection of the best model. Design topics include the completely randomized design, multiple comparisons, blocking and factorials.

Topic Outline: The class will essentially cover four modules
Module 1 -- Introduction to R, RStudio, RMarkdown, data handling and a review of Intro Stat material.
Module 2 -- Simple Linear Regression and related topics
Module 3 -- Multiple Regression and related topics
Module 4 -- Experimental Design

In-class You learn software and statistical methods by doing them! Occasionally we will
Assignments: work problems during class, generally in pairs or groups (but individual in-class assignments may be assigned).

Homework: I anticipate assigning graded homework typically due every week or so. Late homework will be accepted only with prior permission from the instructor. The first

assignment has already been posted and consist of completing some online tutorials and building a basic RMarkdown document.

Exams: We will have an exam midway through the semester on Thursday March 15. A comprehensive final exam will be given on Thursday May 17 12:45-2:45.

Attendance: The pace of this class is such that it will not be advisable to miss any sessions. If you know you will be absent, please inform me in advance. When you are absent, it will be your responsibility to contact another student for the notes and announcements. While attendance does not factor into your grade, I may take attendance for my own records. You are expected to be an active participant for the entire 55-minute class. Indications that this is not happening include sleeping, surfing the web or instant messaging on your laptop, text-messaging on your cell-phone, studying for another class, etc. Please turn your cell phone to silent before class. Students are expected to wait quietly for 15 minutes after class is scheduled to begin. If I have not yet appeared the students are free to leave.

Letters of Accommodation: If you have a letter stating specific testing accommodations to which you are entitled, please come by my office to discuss the accommodations that you will need and to give me a copy of the letter. Even if you do not anticipate using any accommodations, it is a good idea to turn in the letter as soon as possible. Please note that unless I have at least one week's notice I will be unable to provide any accommodation on an exam

Prerequisites: An introductory statistics course: STA261, 301 or ISA205, 225. STA 363 may NOT be taken after credit has been earned for STA 463/STA 563.

Student Code of Conduct: Any violations of Academic Integrity within the Student Handbook will not be tolerated. This includes cheating, plagiarism, storing information in a calculator, sabotage of another's work and disrupting class. See the [Handbook](#) for a complete listing of the student code of conduct. All violations will be handled in accordance with established procedures and policies concerning student academic responsibility. See the [Bulletin](#) for additional details:
<http://miamioh.edu/academics/bulletin/>
<http://www.miamioh.edu/handbook>

Final Grades: At the conclusion of the semester, final grades will be compiled using:

Source	Amounts
In-class Assignments	15%
Homework	40%
Midterm Exam	20%
Final Exam	25%
Total	100%

Grades will be assigned based on:

[97, 100)	A+	[93, 97)	A	[90, 92)	A-
[87, 90)	B+	[83, 87)	B	[80, 82)	B-
[77, 80)	C+	[73, 77)	C	[70, 72)	C-
[67, 70)	D+	[63, 67)	D	[60, 62)	D-
		[0, 60)	F		

Important Dates:

- Thursday, February 15 - Drop date (no grade on transcript)
- Friday, February 23 - Last day to apply for May graduation
- Thursday, March 15 - Midterm Exam
- Monday--Friday, March 19-25 - Spring Break
- Friday, March 22 - Midterm Grades available on Banner
- Monday, April 9 - Last day to drop with a "W"
- Friday, May 11 - Last day of classes (and final date to withdraw from university)
- Thursday, May 17 - 12:45-2:45pm - Final Exam allocated time