

INSTRUCTOR	Dola Pathak dpathak@msu.edu C434 Wells Hall Monday 11:30 – 12:30pm, Wednesday 11:30 – 1:00pm Other times by appointment.																
TEACHING ASSISTANTS	Scott Manski manskisc@msu.edu and Office hours: TBD Nick Smentowski smentow3@msu.edu and Office hours: TBD																
COURSE MEETINGS	001: Monday and Wednesday 8-9:50am Union Hall																
COURSE DESCRIPTION	This course introduces students to the field of data science via the R programming environment. Students will learn to manipulate data objects, produce advanced graphics, tidy and wrangle data, and generate reproducible statistical reports using R markdown. Students will be exposed to the fundamentals of probability and statistical inference, and rudimentary machine learning techniques. Thus, this course will be split into two main parts: (1) learning the basics of how to code in R using libraries like ggplot2, tidyr, dplyr, knitr, etc and (2) performing data analysis using data science techniques in R. Ethics and version control will also be introduced.																
PREREQUISITES	Permission from instructor.																
TEXTBOOK	“ Naked Statistics: Stripping the Dread from the Data ”. Typed course notes and other assigned readings will be provided electronically. Two recommended supplemental books are: “ R for Data Science ” and “ R Cookbook ”.																
OTHER MATERIALS	D2L, R, RStudio, Google Classroom, and Git/GitHub.																
GRADING	Participation, 10% Quizzes (2 lowest dropped), 10% Homework, 30% Midterm 1 (in-class), 20% Midterm 2 (format to be decided), 15% Poster presentation/Project, 15%																
GRADE CUTOFFS	Let X be a student’s final grade computed as a percentage. A student’s final grade on the 4.0 scale will be determined as follows: <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="padding-right: 20px;">4.0</td> <td style="padding-right: 20px;">$93\% \leq X \leq 100\%$</td> <td style="padding-right: 20px;">2.0</td> <td>$73\% \leq X < 78\%$</td> </tr> <tr> <td>3.5</td> <td>$88\% \leq X < 93\%$</td> <td>1.5</td> <td>$68\% \leq X < 73\%$</td> </tr> <tr> <td>3.0</td> <td>$83\% \leq X < 88\%$</td> <td>1.0</td> <td>$63\% \leq X < 68\%$</td> </tr> <tr> <td>2.5</td> <td>$78\% \leq X < 83\%$</td> <td>0.0</td> <td>$0\% \leq X < 63\%$</td> </tr> </table>	4.0	$93\% \leq X \leq 100\%$	2.0	$73\% \leq X < 78\%$	3.5	$88\% \leq X < 93\%$	1.5	$68\% \leq X < 73\%$	3.0	$83\% \leq X < 88\%$	1.0	$63\% \leq X < 68\%$	2.5	$78\% \leq X < 83\%$	0.0	$0\% \leq X < 63\%$
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RCPD	To arrange for accommodation a student should contact the Resource Center for People with Disabilities at http://www.rcpd.msu.edu/ or 517-353-9642.																
IMPORTANT DATES	08/28/2019 Class begins 09/04/2019 Open adds end (8:00pm) 09/23/2019 Last day to drop with refund (8:00pm) 10/16/2019 Last day to drop with no grade reported (8:00pm) 12/04/2019 Class ends																