STAT 850 Computing Tools for Statisticians Fall 2019

#### Instructor

Name: Christopher R. Bilder, PhD Office: Hardin Hall 342C Office hours: Mondays 12-1PM, Thursdays 12:30-1:30PM, and by appointment E-mail: bilder@unl.edu Course website: Available through www.chrisbilder.com

#### Textbooks

Optional:

Xie, Y. (2015). Dynamic Documents with R and knitR, 2nd edition, CRC Press.

Additional resources:

- Chambers, J. (2008). Software for Data Analysis: Programming with R. Springer.
- Delwiche, L. and Slaughter, S. (2012). The Little SAS book: A Primer, 5th edition. SAS Institute.
- Kleinman, K. and Horton, N. (2014). SAS and R: Data Management, Statistical Analysis, and Graphics, 2nd edition. CRC Press.
- Matloff, N. (2011). The Art of R Programming. No Starch Press.
- Venables, W., Smith, D, and the R Development Core Team (2019). An Introduction to R. PDF version comes with R (Select HELP > MANUALS > AN INTRODUCTION TO R).

### Prerequisites

STAT 801 or equivalent; STAT 462, 880, or equivalent is recommended

#### Grades

Grades will be based upon the following:

	Mid-term exam	Final exam	Assignments and quizzes
% of grade	30%	30%	40%

Grading Scale:

А	В	С	D	F
$\geq 90\%$	$\geq 80\%$ and $< 90\%$	$\geq 70\%$ and $< 80\%$	$\geq 60\%$ and $< 70\%$	< 60%

+ and - letter grades are 2.5% from the above cut off points. For example, A- is 90-92.5% and B+ is 87.5-90%.

Students are required to turn in all assignments electronically in Word or PDF documents. An assignment completed in an unreadable or unprofessional manner will be returned to the student. The assignment may be re-done and turned in again; however, points will be deducted from the grade. No late assignments are accepted.

Group work is recommended for assignments! If you work in a group, all group members are expected to participate equally and have a complete understanding of all components for it. A student's assignment grade may be lowered if he/she does not abide by this group work policy.

## **Class recordings**

All classes will be recorded during the semester. These recordings will be posted to the Internet for students in this course and others not enrolled in this course to use for educational purposes. If you do not want your voice recorded, contact the instructor prior to the second class of the semester.

Please do not abuse the availability of these recordings by not coming to class! I recommend using these recordings as a way to review and as a back-up if extenuating circumstances prevent you from attending class.

## Final exam

The final exam is scheduled for 7:30AM to 9:30AM on Friday, December 20.

# Expectations of students

Students are expected in this class to

- 1. Understand all the material in the course lecture notes
- 2. Understand all R and SAS code with their corresponding calculations
- 3. Reproduce all examples in the course lecture notes
- 4. Review the class recordings
- 5. Complete all assignments
- 6. Ask questions when something is not clear

## Additional statements

Please see the online syllabus supplement for additional statements that are required to be part of all syllabi at UNL.