

Instructor

Name: Christopher R. Bilder, Ph.D.

Office: Hardin Hall 342C

Office hours: Tuesdays and Thursdays after class until 11:45AM

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STAT 878 website: Available through www.chrisbilder.com; additional items available on Canvas

Changed to the hour before our class starting on February 6; the location will be our classroom

Textbooks

Required: Shumway and Stoffer (2017). *Time Series Analysis and Its Applications* (4th edition). Springer.

Supplementary:

- Box, Jenkins, Reinsel, and Ljung (2015). *Time Series Analysis: Forecasting and Control* (5th edition). Wiley.
- Pena, Tiao, and Tsay (2000). *A Course in Time Series Analysis*. Wiley.
- Shumway and Stoffer (2019). *Time Series: A Data Analysis Approach Using R*. CRC Press.
- Wei (2005). *Time Series Analysis: Univariate and Multivariate Methods* (2nd edition). Pearson.
- Wei (2019). *Multivariate Time Series Analysis and Applications*. Wiley.

Prerequisites

Either of the following combinations of courses:

1. STAT 821 and STAT 883 (at least concurrent enrollment in both courses) or
2. STAT 870 and STAT 880

Grades

Grades will be based upon the following:

	High test	Low test	Final exam	Projects, quizzes, etc...
% of grade	40%	10%	20%	30%

The “high test” and the “low test” correspond to the two tests taken prior to finals week. The highest (lowest) grade earned on these tests is given a weight of 40% (10%) toward the overall grade.

Grading Scale:

A	B	C	D	F
$\geq 90\%$ and $\leq 100\%$	$\geq 80\%$ 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%.

All projects need to be turned in electronically via Word or PDF documents. No late projects or quizzes are accepted.

I recommend completing the projects in groups. If you work in a group, all group members are expected to participate equally and have a complete understanding of all components for it. I will lower a student's project grade if they do not abide by this group work policy.

Statistical software

The statistical computing environment R will be used extensively in this class. R is available for free from <http://www.r-project.org>. The specific link to download the Windows version is <http://cran.r-project.org/bin/windows/base>. All calculations for the course need to be completed using R.

Class recordings

All Tuesday classes will be recorded during the semester. Links to these recordings will be posted to the course website. Please do not abuse their availability by skipping class. Use these recordings to review and as a back-up if extenuating circumstances prevent you from attending class.

Final exam

The final exam is scheduled for 10AM to 12PM on Thursday, May 16.

Expectations of students

Students are expected in this class to

1. Understand all the material in the course notes
2. Understand all programming code and calculations
3. Reproduce all parts of the examples in the course notes
4. Watch the videos
5. 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.