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|  | Analytics for Business and Economics  ECON 326  Dr. Logan J. Kelly |

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| Contact Information | Office Hours |
| Email: logan.kelly@uwrf.edu  Phone: (715) 425-4993  Mobile: (401) 256-0986  Office: South Hall 127E | By appointment  link: <http://tiny.cc/DrKelly> |

# Course Description

The course will examine different inferential statistical techniques and their many applications in Business and Economics. Students will understand how to use technology to conduct statistical analysis, will demonstrate the ability to collect data, use the data in the analysis of an economic/business problem, provide a written or oral report on the results, will understand how and when to construct confidence intervals, apply hypothesis testing, ANOVA, regression and time series analyses to solve various types of economic and business problems.

# Course Objectives

1. Students will understand how to use computer technology to conduct statistical analysis.
2. Students will demonstrate the ability to collect data, use the data in the analysis of an economic/business problem, and provide a written or oral report of the results.
3. Students will understand how and when to apply hypothesis testing, ANOVA, regression analysis and time series forecasting, goodness of fit and independence tests, and nonparametric methods to solve various types of business and economic problems.

# Required Text

*Introductory Statistics*. Openstax. Barbara Illowsky, et. al. <https://openstax.org/details/books/introductory-statistics>

and

*Learning Statistics with R - A tutorial for Psychology Students and other Beginners.* Danielle Navarro

<https://stats.libretexts.org/@go/page/3936>

# Prerequisites

Econ 201 and 202, and a grade of “C-” or better in Econ 226 or Math 226 (or equivalent of

Introductory Statistics from other areas)

# Technological Prerequisites

Basic knowledge of Windows operating systems, MS Office, and web based research.

# Exams

This course is divided into 8 modules. There will be one exam covering each modules. You will be able to take each exam as many times as you would like. All exams must be completed by the end of the course. You may **NOT** consult with another person about an exam question while taking the exam, and you may **NOT** discuss exams with other students in the class at any time. Discussion of exams should be between the student and the professor only.

# Reading

Reading in an online class is even more important than in a traditional class. Just as in a traditional class, you should read each chapter before viewing the lecture video. There also may be material on exams that is covered in the reading, but not covered in the lecture videos.

# Preparation Expectations

Preparation on your own is extremely important to success in this class. Moreover, eight weeks is a very short time. You should expect to spend at least 10 hours per week preparing. Regular, short study sessions will improve your performance dramatically, while waiting to study until the last minute will greatly increase the likelihood of receiving a poor grade.

# Online Office Hours and Communication

While this course is designed to have a very flexible schedule, it is not meant to be a self-study correspondence course. It is important that you have access to a qualified instructor for the same individualized instruction that you would receive in a tradition course. To facilitate this, I will use Zoom. Use this link to schedule an appointment: <http://tiny.cc/DrKelly>

# Grading

Your grade will be determined by calculating the weighted average of your chapter quizzes and your exam scores. The weights are as follows:

* Case Studies 90%
* Tasks 5%
* Wrap-up Quizzes 5%

Letter Grades will be assigned as follows:

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| A 93.50% or above  A- 89.50% - 93.49%  B+ 87.50% - 89.49%  B 82.50% - 87.49%  B- 79.50% - 82.49%  C+ 77.50% - 79.49% | C 72.50% - 77.49%  C- 69.50% - 72.49%  D+ 67.50% - 69.49%  D 59.50% - 67.49%  F 59.49 or bellow |

This scale may be adjusted at the end of the semester. If your grade is a borderline case (within 1% of the next highest letter grade), participation will be used to determine whether you will receive the higher grade.

# Students with disabilities

Any student in this course who has a disability that prevents the fullest expression of abilities should contact me personally as soon as possible so that we can discuss class requirements and accommodations. The University of Wisconsin-River Falls welcomes students with disabilities into its educational programs, activities, residential halls, and everything else it offers. Those who will need academic adjustments or accommodations for a disability should contact the Disability Services Office (105 Davee Library; 715-425-3531). Before final decisions can be made to allow academic adjustments and accommodations students must provide documentation that sufficiently indicates the nature of their situation. Additional information is available at <http://www.uwrf.edu/disabilityservices/ADA.html>.

# Academic Misconduct

The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others’ academic endeavors. A more detailed description of Student Academic Disciplinary Procedures may be found in Regents Policy Statements, UWS Chapter 14.

# Economics Program Mission:

The mission of the Department of Economics is to provide students with analytical, critical thinking, research, and communication skills that are necessary for advancing in the public sector, the non-profit sector, and the business sector; and for seeking an advanced degree. The department also provides support to the College of Business and Economics by offering courses satisfying core and elective requirements for students in the Business Administration major and minor, and Accounting major. In addition, the department supports the liberal arts orientation of this university by contributing courses to the general education, international studies, American diversity, and global perspectives curricula.

# Economics Program Learning Objectives

1. Understand basic economic principles in order to understand and explain the world around them and to prepare for higher-level course work.
2. Use economic theory to critically examine problems in the U.S. and global economy so that they understand, propose, and work for appropriate economic policies and solutions.
3. Demonstrate and apply knowledge gained in the area of Statistics.\*
4. Conduct economic research, utilizing the tools of Economists, and present results so that they can contribute to economic education.\*