

## Syllabus

# Math 448 Introduction to Statistics. Fall 2022.

## Binghamton University

- Instructor: Vladislav Kargin
- Office: WH-136
- Meeting time and location: MWF 8:00 - 9:30 am at CW 212.
- Office hours: MWF 9:45 - 10:30, Monday 1 - 2 PM (in person, office WH136, or Zoom by appointment).

**This course is a 4-credit course, which means that in addition to the scheduled lectures/discussions, students are expected to do at least 9.5 hours of course-related work each week during the semester. This includes things like: completing assigned readings, participating in lab sessions, studying for tests and examinations, preparing written assignments, completing internship or clinical placement requirements, and other tasks that must be completed to earn credit in the course.**

## Prerequisite

- A grade of C or better in Math 447

## Description

Understand the fundamental idea of statistical inference; conduct standard inferences including point estimation, confidence interval and hypothesis testing. Derive, evaluate and compare point estimators and confidence intervals. If time permits: Apply statistical inference to simple linear regression models. Provides understanding of basic concepts needed for more advanced courses in statistics. Gives initial exposure to statistical software.

## Recommended Texts

- Course Lecture Notes – they will be made available at the Piazza webpage
- “Mathematical Statistics with Applications” by Wackerly, Mendenhall, and Scheaffer

We will cover Chapters 8 - 11 of the book. Electronic copy will be made available at Piazza. Lecture notes are mostly based on the book, however, sections are rearranged and some material is added.

## Piazza

We will use Piazza (“<http://piazza.com/>”) for communication. All announcements will be sent to the class using Piazza. You can sign up at “<http://piazza.com/binghamton/fall2022/math448>” or you can send me an email and I sign up you.

## Homework

Majority of homework will be assigned through WebAssign (<https://www.webassign.net>). The key for enrolling is: binghamton 6504 3711.

After a short grace period, you will be required to pay for your WebAssign account (around \$120 per term).

Additional homework will be assigned through Gradescope ("<https://www.gradescope.com/>").

Brightspace will only be used minimally if at all.

## Software

Some homework will involve R, which is a statistical software package popular among statisticians. Installation instructions and downloads can be found at <https://www.rstudio.com/products/rstudio/download/>.

## Exams

There will be two midterms and a final exam. Approximate schedule:

Midterm 1 - Sep 28

Midterm 2 - Nov 4

Final - as determined by the university

## Grading

- Homework 15%
- Midterms 50% (25 each)
- Final Exam 35%

From:

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Permanent link:

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