Statistics MA 486/586-1C Spring 2022

The class meets on Mon/Wed/Fri from 10:10am to 11:00am in Room HHB126.

Instructor: Dr. Roman Shterenberg

Office: UH4035, ph. 934-2154

Office hours: after class or by appointment

E-mail: [shterenb@uab.edu](mailto:shterenb@uab.edu)

There is NO required textbook for this course.

Grading policy: No midterm or final tests will be given. The score will be based on homework assignments only. There will be 5 homework assignments. The worst one will be dropped. Four other assignments will contribute 25% of the score each.

Final grade will be calculated as follows

85+ - A; 70-84 – B; 55-69 – C.

Homework: You need to submit your homework on the due date in class (or put it under the door of the instructor’s office). No late homework is accepted.

To MA 586 students: You are taking this course at the graduate level! You will get special Graduate homework exercises. Unlike regular homework assignments, the graduate exercises are mandatory for MA 586 students. They will make 15% of your homework grade, the rest will be re-scaled to 85%.

**Syllabus**: Basic sampling and data analysis, Simulation, Point estimation, Confidence

Intervals, Sufficient statistics, Rao-Cramer bound, Tests for binomials, Tests for normals,

Goodness-of-fit test, Contingency tables, Two factor analysis, Regression, Order statistics,

Nonparametric methods: Wilcoxon test, Run test, Kolmogorov-Smirnov test.

The syllabus is tentative, some changes are possible.

Regular class attendance is important and strongly encouraged. If you have to miss a class, study at home thoroughly. This syllabus as well as homework assignments with due dates will be distributed to all enrolled students via UAB’s class Canvas system. Thus you should make sure to regularly check your UAB email/Canvas for notifications, or to keep the forwarding address up-to-date.

If you would like to use a book in addition, you can buy one, or check one out from a library. Here is the suggested book:

R. V. Hogg, E. A. Tanis, D. L. Zimmerman, Probability and Statistical Inference, 9th Ed. Pearson 2015.