

Mathematical Statistics, MA 486-25 Spring 2000

Class meets Tuesdays and Thursdays 5:45pm-7:50pm in 128 CB15 (changed to 211 Bell)

Instructor: Dr. Nikolai Chernov

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Office hours: Tuesdays, Thursdays, 4:00-5:20pm and by appointment.

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Text: Hoggs & Tanis *The Probability and Statistical Inference*.

Grading policy: (One of two schedules that yields a better grade for you)

Homework	15 % or	0 %
Midterm I (Apr 6)	25 %	30 %
Midterm II (April 27)	25 %	30 %
Final (May 25, 6-9pm)	35 %	40 %

To 586 students: You are taking this course at a *graduate* level! You will be given extra, more difficult, assignments periodically. Unlike regular homework assignments, those extra ones are mandatory. The extra assignments will make 15% of your course grade, the rest will count for 85%.

Homework: Problems will be assigned weekly on Tuesdays, unless announced otherwise. HW will be due the next Tuesday after assignment. Corrected and graded HW will be returned on Thursday the same week. If you turn the HW in and the schedule #1 above gives you a better grade, it will be automatically applied. Otherwise, your HW scores will be dropped and the schedule #2 will be applied. One (lowest) HW score will be dropped in any case. Half credit is given for late homework.

Withdrawal Policy: Last day to withdraw from the course with a "W" is May 2. Remember: WP/WF no longer exists.

All tests in this course are **open-book** and **open-notes**.
You may use a calculator, and you may actually need one.

Welcome to MA 486 and best of luck to you all.

Syllabus

1. Display of data. Example of a point estimate	1.2 + 1.4 + 6.1	Mar 21
2. Point estimation	6.1	Mar 23
3. Confidence intervals for means	6.2 + 6.3	Mar 28
4. Confidence intervals for variances and proportions	6.4 + 6.5	Mar 30
5. Sample size, sufficient statistics, Rao-Cramer	6.6 + 12.1 + 12.3	Apr 4
6. TEST - I (covers classes 1-5)		Apr 6
7. Tests of hypotheses on binomials	7.1	Apr 11
8. Power and sample size	7.2	Apr 13
9. Tests of hypotheses on normals	7.3	Apr 18
10. Tests on equality of two normals	7.4	Apr 20
11. Goodness-of-fit test.	7.5	Apr 25
12. TEST - II (covers classes 7-11)		Apr 27
13. Tests of equality of several means	8.1	May 2
14. Two-factor analysis of variance, regression	8.2 + 1.6	May 4
15. Regression	8.3 + 8.4	May 9
16. Order statistics	10.1 + 10.2	May 11
17. Testing for percentiles	10.3 + 10.4	May 16
18. Two-sample tests, run tests	10.5 + 10.6	May 18
19. Kolmogorov-Smirnov test	10.7	May 23
FINAL EXAM (covers classes 13-19)		May 25

The syllabus is tentative, some changes are possible.