Syllabus

Course: STAT 263, Advanced Statistical Theory I
Semester: Fall, 2010
Time: Thursday, 6:10-8:40 pm.
Location: 2020 K, Room 6

Instructor:
Name: Tapan Nayak
Campus Address: 2140 Pennsylvania Ave., Room 105
Phone: (202) 994-6549
E-mail: tapan@gwu.edu
Office hours: R, 4:50-5:50 pm. Other times are available by appointment.

Course description
This is an advanced mathematical statistics course. Topics include sufficiency, ancillarity, completeness, unbiased estimation, Cramer-Rao inequality, Bayesian estimation, decision theory, hypotheses testing.

Course prerequisite: Stat 201-2.


Learning outcomes:
As a result of completing this course, students will be able to:
1. Describe and explain major logical foundations of statistical inferences.
2. Read and comprehend new advanced material.
3. Derive appropriate estimators and tests under a variety of statistical models.
4. Apply mathematical techniques to do research and solve new problems.

GRADING: HW 60%; Final Exam (cumulative and closed book) 40%.
HW will be assigned every week. Solve all problems on your own, and present both mathematical derivations as well as relevant logical arguments. It will not be enough to present only some mathematical expressions and equations; grades will depend also on the quality of writing.

University Policy on Religious Holidays:
1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance;
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations;
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities.
ACADEMIC INTEGRITY
I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” For the remainder of the code, see: http://www.gwu.edu/~ntegrity/code.html

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM
DISABILITY SUPPORT SERVICES (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300
The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
  http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

SECURITY
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.