Syllabus

Course: STAT 6202, Mathematical Statistics  Semester: Spring, 2012
Time: Monday & Wednesday, 12:45-2:00 pm.
Location: 2020 K, Room 12

Instructor:
Name: Tapan Nayak
Campus Address: Rome Hall, Room 567
Phone: (202) 994-6549  E-mail: tapan@gwu.edu
Office hours: MW 10:30-11:30 am. Other times are available by appointment.

Course description
This course will cover logical and mathematical foundations of some statistical inference procedures. Topics include sufficiency, ancillarity, completeness, unbiased estimation, Cramer-Rao inequality, Bayesian estimation, hypotheses testing, and interval estimation.

Course prerequisite: Stat 6201.


Learning approach:
• Take charge of your own learning.
• Constructive learning: Create new knowledge and understanding, merge them with your previous ideas and experience and change your prior views as necessary.
• Restate your new knowledge in your own words.

Some learning techniques:
• Ask questions, explore, and assess your understanding. Don’t be afraid to expose your weaknesses.
• Group study and discussion.
• Take help from TA and professor.

Learning outcomes:
As a result of completing this course, students will be able to:
1. Describe and explain logical foundations of statistical inferences.
2. Read and comprehend advanced material on statistical inference.
3. Derive appropriate estimators and tests under a variety of statistical models.

CLASS POLICIES:
1. Students should attend all classes and engage in class activities.
2. Laptops, cell phones and other electronic gadgets must be turned off during class time.

Grading Policy: Quizzes 30%; Midterm Exam 30%; Final Exam 40%.
Notes: 1. All quizzes will be closed book and unannounced. Quizzes may cover material discussed in the same class. **No make-up quiz will be given. So, do not ask for make-up quizzes.** Two lowest quiz grades will be discarded.
   2. The midterm and the final exams are closed book.
   3. The Midterm exam will be given on **March 7, 2012.**
   4. Make-up midterm will not be given, except for very special circumstances.
   5. The final exam will be based on the entire syllabus and will be given during the final exam schedule.

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](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/](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](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.