

MARSHALL UNIVERSITY  
DEPARTMENT OF MATHEMATICS AND STATISTICS  
STUDENT INFORMATION SHEET AND SYLLABUS  
SPRING 2014

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COURSE:

Title : MTH 420/520 – Nonparametric Statistics  
Section : 201  
CRN : 3390/3431  
Credit hours : 3 hours  
Class time : MWF 2:00 - 2:50 PM  
Classroom : SH 514 (Smith Hall)

SEMESTER: Spring 2014

INSTRUCTOR: Dr. Avishek Mallick

Office : SH 741A  
Email : [mallicka@marshall.edu](mailto:mallicka@marshall.edu)  
Phone ext. : 3443  
Office Hours : MWF 11:00 AM -12:00 noon  
TR 1:30 - 3:00 PM and by appointment.

PREREQUISITE: Some familiarity with calculus and linear algebra and permission of instructor.

COURSE DESCRIPTION AND OBJECTIVES:

This course covers topics in variety of nonparametric or distribution-free methods for practical statistical inference problems in hypothesis testing and estimation, including rank procedures and randomization procedures.

TEXT INFORMATION:

Title : *Nonparametric Statistical Inference, 5<sup>th</sup> edition.*  
Author : Gibbons, J.D., Chakraborti, S.  
ISBN : 9781420077612  
Publisher : CRC Press  
Year : 2010

COVERAGE: Chapters 1 – 6.

ATTENDANCE:

Students are expected to attend all scheduled classes. It is the student's responsibility to find out what was discussed in a missed class. Although, attendance records will not be used to compute grades (except possibly in borderline cases), however, missing class can be expected to significantly reduce your chances of success. Note also that it is the student's responsibility to present approved notice of any absence that would be excused under the terms and regulations stipulated by the university.

### PLAGIARISM:

Note that plagiarism (the submission as one's own work of any oral, graphic, or written material wholly or in part created by another), is a form of academic dishonesty. Sanctions for academic dishonesty shall be imposed in accordance with university's guidelines on such matter.

### HOMEWORK:

Homework problems will be collected and graded. Make it a habit to do your homework the same day they are assigned. Ensure to submit your homework as at when due. Submission within 24 hours from when it is due will be based on 80% of full credit. No late submission will be accepted after 24 hours from when it is due. You are welcome to collaborate with other students on homework, although you must turn in your own work, and written in your own style and words. Solutions to problems must be made clear and neat. In cases where solutions require explanation and derivation, a one-number solution will not be accepted. Homework exercises assigned on a Tuesday (Thursday) shall be due for submission the following Thursday (Tuesday).

### STUDENT BEHAVIORS:

Students are advised to turn their cell phones and other noise generating devices off prior to entering the class. In the case where a student awaits any emergency call, the noise should be restricted and made personal. And in this case, I should be notified as soon as the student enters the class. Food items, apart from water or soft drink, are not allowed in the class. The reading of newspapers and other unrelated materials while the class is in session is prohibited. Please ensure that other students are respected.

### CHEATING:

Note that in a case where a student is suspected to have cheated, the student may be asked to re-take the test. And where the student is found or confirmed to have cheated, a zero grade will be awarded to the student.

You may wish to refer to other university policies concerning academic dishonesty at, <http://www.marshall.edu/wpmu/academic-affairs/policies/#AcademicDishonesty>

### OTHER POLICIES:

- Information regarding the university policy for students with disability can be found in <http://www.marshall.edu/wpmu/disabled>
- Statement regarding University Computing Services Acceptable Use Policy can be located at <http://www.marshall.edu/ucs/policies.asp>
- Statement regarding Marshall's policy about inclement weather can found in the link <http://www.marshall.edu/ucomm/weather.html>
- Statement regarding Marshall's policy on Affirmative Action can found in the link <http://www.marshall.edu/eoaa/Forms/EEO-Policy.pdf>

## STATISTICAL RESOURCES:

There are many statistical software, and you are free to use any that you find applicable. You are encouraged to use the Computer Lab in SH532. The SAS software is installed on those computers for those of you who would like to use SAS. The R statistical package shall be used for demonstration of some topics in class. You may wish to install this package on your laptop. Visit <http://www.r-project.org/> or <http://en.wikipedia.org/wiki/R> for details.

## ASSESSMENT:

The final grade will be based on the following components:

Homework	30%
Examination I	20% [to be announced]
Examination II	20% [to be announced]
<u>Final Examination</u>	<u>30% (Comprehensive)</u>

The semester grade will be based on the percentage of total possible points, using the following scale.

90 -100% -- A
80 - 89% -- B
70 - 79% -- C
60 - 69% -- D
00 - 59% -- F

***FINAL EXAMINATION: Monday May 5 [12:45 – 2:45 PM]***