

STA 104 APPLIED STATISTICAL METHODS: NONPARAMETRIC STATISTICS

Instructor:	Xiner Zhou	Time:	MWF 11:00 - 11:50 AM
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Winter Quarter, 2023

	Monday	Tuesday	Wednesday	Thursday	Friday
11:00 am	Lecture Wellman Hall 226		Lecture Wellman Hall 226		Lecture Wellman Hall 226
11:30 am					
12:00 noon					
12:30 pm					
1:00 pm					
1:30 pm					
2:00 pm				Discussion BOB2 216	
2:30 pm					
3:00 pm	TA OH online zoom				
3:30 pm					
4:00 pm					Instructor OH online zoom
4:30 pm					
* 5:00 pm					

Dates	Topic	Events	Deadline
01/09	Syllabus	HW1 out	
01/11	Chapter 1: Parametric and Nonparametric Methods		
01/13	Chapter 1: Binomial problem		
01/16	University Holiday	HW2 out	HW1 due
01/18	Chapter 2: Wilcoxon Signed Rank Test		
01/20	Chapter 2: Wilcoxon Signed Rank Test- Signed Test		

01/23	Chapter 2: Signed Test	HW3 out	HW2 due
01/25	Chapter 2: A Comparison of Statistical Tests		
01/27	Chapter 2: Paired Comparisons		
01/30	Chapter 3: Two-Sample Permutation Test	HW4 out	HW3 due
02/01	Chapter 3: Wilcoxon Rank-Sum Test		
02/03	Chapter 3: Wilcoxon Rank-Sum Test		
02/06	Chapter 3: Tests for Equality of Scale Parameters	HW5 out, Instruction about midterm send via email	HW4 due
02/08	Chapter 3: Tests for Equality of Scale Parameters		
02/10	Chapter 3: Kolmogorov-Smirnov test		
02/13	Midterm Exam	HW6 out	HW5 due
02/15	Chapter 4: Kruskal-Wallis Test		
02/17	Chapter 4: Jonckheere-Terpstra Test for Ordered Alternatives		
02/20	University Holiday	HW7 out	HW6 due
02/22	Chapter 4: Fligner-Wolfe Test for Treatments versus a Control		
02/24	Chapter 4: Two-Sided All-Treatments Multiple Comparisons for General Alternative		
02/27	Chapter 4: One-Sided All-Treatments Multiple Comparisons for Ordered Treatment Effects Alternatives	HW8 out	HW7 due

03/01	Chapter 4: One-Sided Treatments-versus-Control Multiple Comparisons for Treatment-versus-Control Alternatives		
03/03	Chapter 5: Friedman test for General Alternatives in a Randomized Complete Block Design		
03/06	Chapter 5: Page test for Ordered Alternatives in a Randomized Complete Block Design	HW9 out	HW8 due
03/08	Chapter 5: Two-Sided All-Treatments Multiple Comparisons for General Alternative in a Randomized Complete Block Design		
03/10	Chapter 5: Mack-Skillings test for General Alternatives in a Randomized Block Design with Equal Number of Replications Per treatment-Block Combination		
03/13	Chapter 5: Two-Sided All-Treatments Multiple Comparisons for General Alternative in a Randomized Block Design with Equal Number of Replications Per treatment-Block Combination	HW10 out, Instruction about final send via email	HW9 due
03/15	Chapter 6: Intro to Bootstrap		
03/17	Chapter 6: Bootstrap Confidence Intervals		
03/23		Final Exam	

Course Pages:

- **Canvas:** All the course material will be posted on canvas
- **Discord:**
primary communication platform
Please use the following link to join the class server <https://discord.gg/BSXDcWFX>

Reading: Lecture notes .

The R Resources: Some resources to brush up your R knowledge:

- [A \(very\) short introduction to R](#)

- [R for Beginners](#)
- [Using R for Data Analysis and Graphics](#)

Grading Policy:

- Homework assignments (30%)
- Midterm (30%):
- Cumulative Final (40%):

Course Prerequisites: STA 013 C- or better or STA 013Y C- or better or STA 032 C- or better or STA 100 C- or better