# STA0061: Elementary Computational Statistics

## Course Syllabus - Spring 2024

**Instructor**: Kipoong Kim

Office Hours: Friday: 09:00 - 12:00 PM, and by appointment

Office: Room 411, Building 32

 $\mathbf{E}\text{-}\mathbf{mail}: kkp7700@gmail.com$ 

**Lecture Hours** : Tuesday 15:00-16:15, and Thursday, 16:30-17:45 PM

Prerequisite: Calculus, Introduction to Statistics, Linear Algebra

**Textbook**: No textbook is required in this course.

References: • Wasserman, L. (2004). All of statistics: a concise course in statistical

inference. Springer Science & Business Media.

### Course Schedule:

Weeks	Agenda	Assignments	Remarks
Week 1	Introduction to Statistical Programming and Python		
Week 2	Functions, Conditionals, Recursion and Iteration	Assignment 01	
Week 3	Strings and Lists		
Week 4	Dictionaries and Tuples	Assignment 02	
Week 5	numpy, scipy and matplotlib		
Week 6	Basics of pandas	Assignment 03	
Week 7	Advanced pandas		
Week 8	Midterm Exam		4/23
Week 9	Sampling Distribution of Statistics		
Week 10	Sampling Distribution of Statistics	Assignment 04	
Week 11	Statistical Estimation		
Week 12	Statistical Estimation	Assignment 05	
Week 13	Hypothesis Testing		
Week 14	Hypothesis Testing	Assignment 06	
Week $15$	Make-up week		
Week 16	Final Exam		6/18

#### Exam Schedule:

- Midterm Exam: Tuesday, April 23, 15:00 16:00 PM
- . Final Exam: Tuesday, June 18, 15:00 16:00 PM

## $\mathbf{Exam}\ \mathbf{Policy}\ :$

- All exams are open book.
- You must take the final exam to pass this course.

## Grading Policy:

- Evaluation:
  - Attendence (10%): Poor attendance will result in an F grade.
  - Homework (30%) : Late or Copying HW is NOT accepted
  - Midterm (30%)
  - Final (30%)
- (Tentative) Final Course Grade

A+: less than 30%

B+: less than 40%

C+ : less than 30%

 $F: Total\ score \le 20 \quad (if\ MAX = 100)$