

# Homework 1

MA506 Probability and Statistical Inference: Fall 2022

Grading Rubric

**100 points**

## Question 1: (15 points)

- Correct Logic (10 points)
- Correct output for  $n = 0/1$  (2 points)
- Correct output for general  $n$  (3 points)

## Question 2: (15 points)

- Correctly computing  $\mu$  (2.5 points)
- Correctly computing  $\sigma$  (2.5 points)
- Correct returning the final list (10 points)

## Question 3: (25 points)

- Part 1 (5 points)
- Part 2(a) (10 points)
- Part 2(b) (10 points)

## Question 4: (45 points)

- Part 1 (5 points)
- Part 2 (5 points)
- Part 3 (15 points)
  - Correct histogram (10 points)
  - Correct pdf (5 points)
- Part 4 (15 points)
  - Correct Experimental setup (3 points)
  - Individual plots (3 x 4 points)
- Part 5 (5 points)