# Syllabus - MATH 4720/MSSC 5720: Statistical Methods

## Course Information

**Course Title:** MATH 4720/MSSC 5720: Statistical Methods
**Meeting Time:** TuTh 11:00am - 12:15pm
**Location:** Cudahy Hall 145 (Microsoft Teams)

## Instructor Details

- **Name:** Mehdi Maadooliat, Ph.D.
- **Office:** CU 351
- **Office Hours:** TuTh 12:25 - 1:55pm in CU 351 or by e-mail

## Course Description

Probability, discrete and continuous distributions. Treatment of data, point and interval estimation, hypothesis testing. Large and small sample method, regression, non-parametric methods. An introductory applications-oriented course recommended for students who wish to acquire a basic understanding of statistical methods. May not be taken for credit by those who have completed MATH 4710.

## Course Topics

- Introduction to probability and probability distributions
- Sampling and descriptive measures
- Inference and hypothesis testing
- Linear regression and analysis of variance

## Prerequisites

- MATH 1400, MATH 1410, or MATH 1450

## Textbook

**Title**: An Introduction to Statistical Methods & Data Analysis (6th Edition)
**Authors**: R. Lyman Ott, Michael Longnecker
**Year**: 2010

## Grading Breakdown

- **Homework**: 15%

- **Examinations**: 25% each (2 exams)

- **Final Exam**: 30%

- **Best Exam**: 5%

You will **NOT** be allowed any extra credit projects to compensate for a poor average. The final grade is based on the following scale:

## Grading Scale

| Grade | Range |
| --- | --- |
| A | 93.5 - 100 |
| A- | 90.0 - 93.5 |
| B+ | 86.5 - 90.0 |
| B | 83.5 - 86.5 |
| B- | 80.0 - 83.5 |
| C+ | 76.5 - 80.0 |
| C | 73.5 - 76.5 |
| C- | 70.0 - 73.5 |
| D+ | 66.5 - 70.0 |
| D | 63.5 - 66.5 |
| D- | 60.0 - 63.5 |
| F | below 60.0 |

**Note:** No late homework will be accepted, and no make-up work will be allowed unless in the case of an emergency. Submit incomplete work if necessary, but ensure scanned PDFs are legible before submission.

## Exam Dates

- **Midterms**: Feb. 17th, Mar. 27th (70 minutes long)

- **Final Exam**: May 6th from 10:30 am to 12:30 pm

### Homework Policy

Homework is required for a better understanding of the material and must be submitted to D2L. No late homework will be accepted, and two homework assignments will be dropped. It is recommended to submit even incomplete work. You can scan your homework and submit it as a PDF, but ensure it is readable.

### Attendance Policy

Attendance is required, and the College of Arts and Sciences attendance policy will be observed.

### Make-up Policy

There will be no make-up exams or homework unless there is an emergency.

### Honor Code

Marquette University Honor Code:
"I recognize the importance of personal integrity in all aspects of life and work. I commit myself to truthfulness, honor, and responsibility, by which I earn the respect of others. I support the development of good character and commit myself to uphold the highest standards of academic integrity."

## Important dates

- **Monday, January 13:** Classes begin
- **Tuesday, January 21:** Drop/add ends
- **Saturday - Sunday, March 8 - 16**: Spring Break
- **Friday, April 11:** Last day to withdraw with W
- **Saturday, May 3**: Classes end
- **Tuesday, May 6, 10 am - 12 pm**: Presentations

For more important dates, see the full MU Academic Calendar.

## Important Note

The syllabus may be modified throughout the course. Any substantial modifications will result in a reissued syllabus.