Learning Performance for Students

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Presentation Outline

Introduction

Hypotheses

Recommendations

Introduction

Goal:
The analysis is to generate analytical insights and provide recommendations for improving the learning performance of Business school students at the University of Wisconsin - Madison

Course Dataset:
The analysis only takes courses offered under University of Wisconsin - Madison School of Business into considerations

The analyses look at the student grades as the reflection of the performance.

Hypothesis I

H1: Course instructors affect the ratio of A grades.
H0: Course instructors have no effect on the ratio of A grades.

# The Impact of Course Instructor on Grades

- This hypothesis testing looks at courses that give out grades.
- Two-way ANOVA test suggests that the choice of Course Instructor significantly influences the ratio of A grades.

Hypothesis II

H1: The average grade among students who take online courses is lower than the rest of the students.
H0: The average grade among students who take online courses is not different from other students.

The Impact of Online Courses to Grades
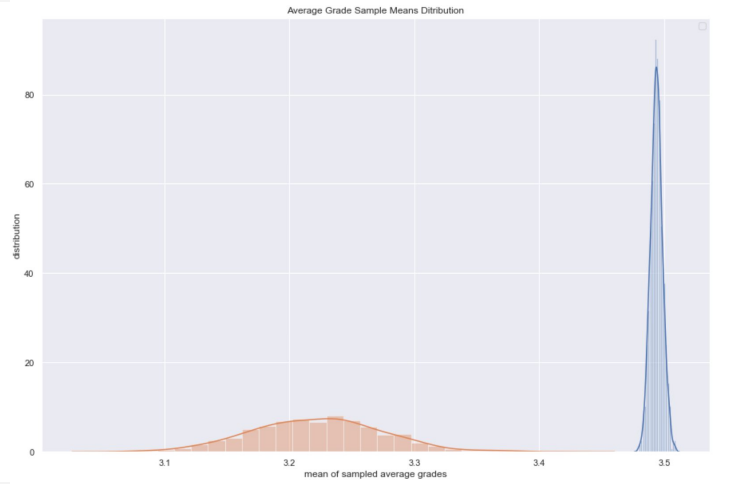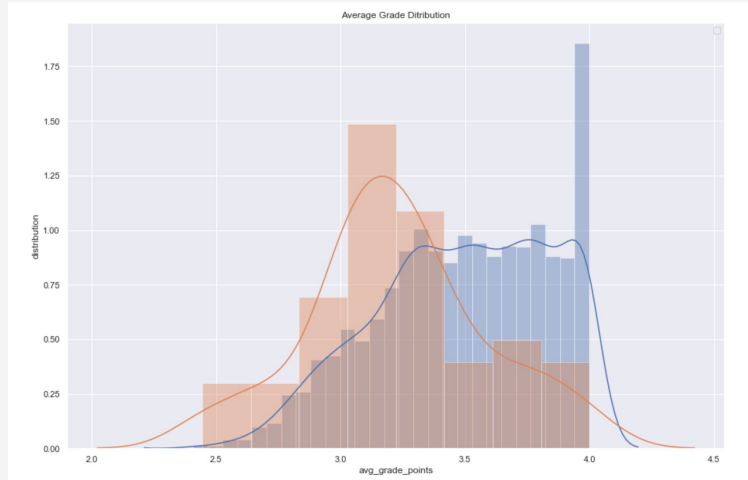
The average grade among students who take online courses is lower than the rest of the students.

Methodology: One-Tailed T-Test

Hypothesis III

H1: There is a difference between grades offered in Fall term and those in Spring term.
H0: There is no difference between grades offered in Fall term and those in Spring term.

The Impact of Terms on Grades

Grades in Fall and Spring Terms
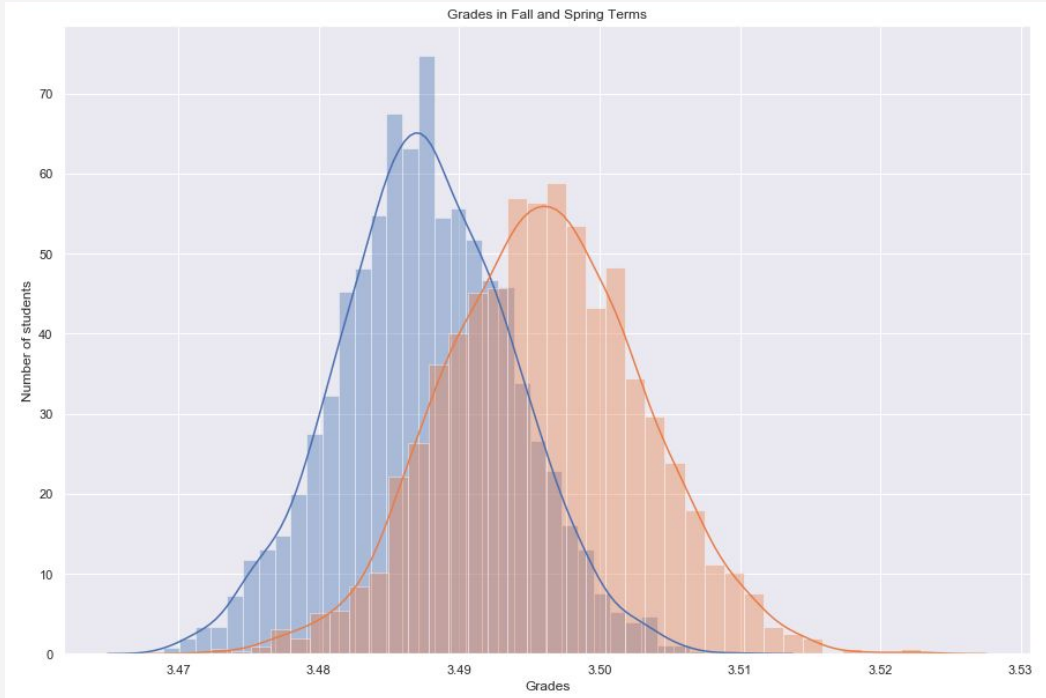
There is no statistically significant difference between average grades earned in Fall semester and Spring semester.
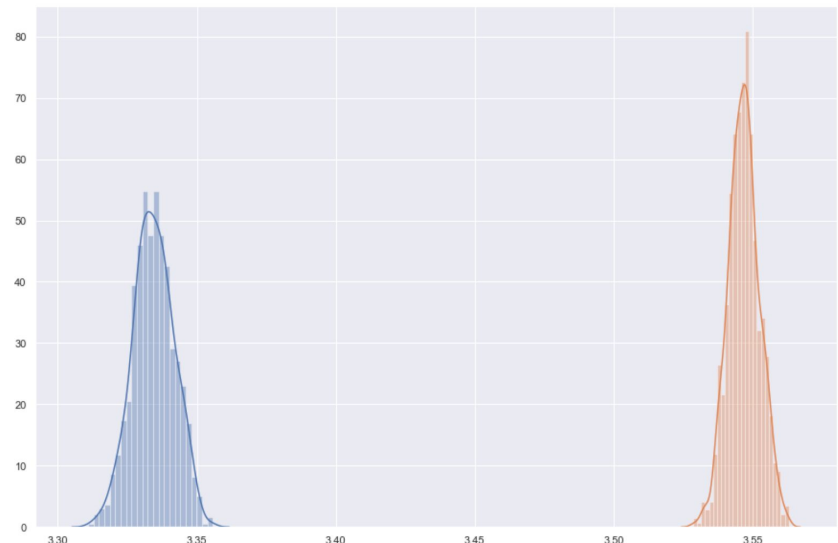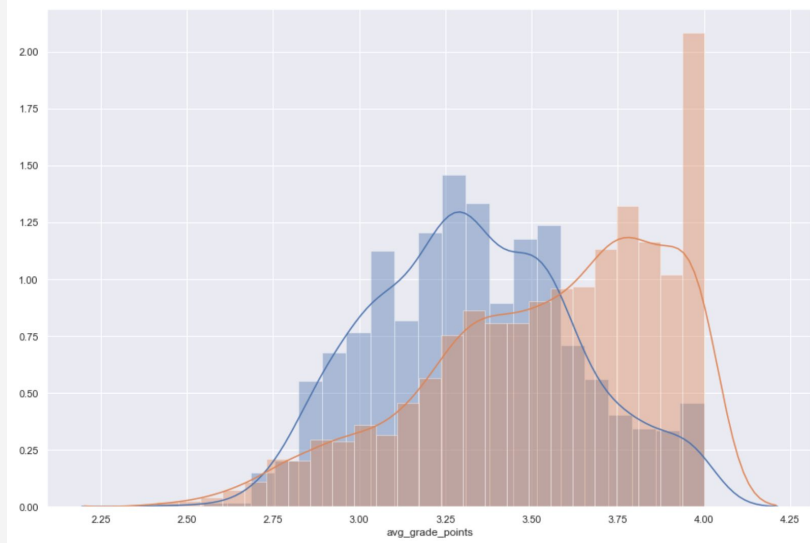
Methodology: Two Tailed T-test

Hypothesis IV

H1: There is a difference between lecture classes of different size students in terms of average grades.
H0: There is no difference between lecture classes of different size students in terms of average grades.

The Impact of Lecture Class Size on Grades

There is a difference between lecture classes of different size students in terms of average grades.

Methodology: Two Tailed T-test

Recommendations

Professors should allocate more time towards students for better learning experience

1. ## Standardized Grading System

Each course should have a guideline for how the grades are calculated prior to the course starting date

2. ## Flexible and Responsive Interactions for Online Courses

The course structure and grading system should be well established with an emphasis on real time question answering sessions

3. ## Lower Professor : Student Ratio

To improve learning quality, the department should consider lowering the professor: student ratios in order to improve the learning experience