Evaluation of multiple sections of a single animal science course for consistency of instruction quality

Background

- What are the effects of teaching multiple sections of the same course?
- Am I being fair to each section?
- Did I say that already?
Objective

- To evaluate GPA, average final course grade, and student evaluations of four sections of a sophomore level animal science course taught by a single instructor.
Materials and Methods

- Four sections of AGRI 2360 (Animals & Society; n=96)
  1. 8 am
  2. 9:30 am
  3. 12:30 pm
  4. 3 pm

- All sections were on Tuesdays and Thursdays
  - 1 hr 20 min.
Materials and Methods

- For each section data collected included:
  - Initial student GPA
  - Final course grade
  - Student evaluation of instructor quality
Initial GPA by Section

ab Sections with different superscripts differ at $P = 0.11$
The 8:00 AM and 12:30 PM courses tended to have higher GPAs in comparison to the 9:30 and 3:00 PM courses.

May be driven by:
- Student motivation
- Course availability
Final Grade by Section

![Bar chart showing final grades by section at different times of the day. The chart indicates that the section at 12:30 PM has the highest average grade, followed by 9:30 AM and 8:00 AM, with the 3:00 PM section having the lowest average grade. The p-value is 0.34.]
Final Grade

- No difference was detected between sections in final grade.
- Less than a 5 point difference in grade across all 4 sections.
- Consistency of teaching graded material.
  - What about ungraded material?
Average Teaching Score by Section

<table>
<thead>
<tr>
<th>Time</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>3.7</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>3.7</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>4.0</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Student Assigned Teaching Evaluation

- Noted improvement of teacher evaluation scores throughout the day with repetitive teaching.
  - Improved delivery
  - Student perception
Implications

- High school courses are often repetitive.
  - Expect improvement as the day goes on.

- Not often we see repetitive courses at the university level.
  - Instructors/Lecturers
  - Students have the choice of class time.
Questions?