Impacts of Course Delivery Methodology and Duration for a Hands-On Learning Based Approach to Livestock Handling

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Background

◆ Undergraduate demographics and needs
  ■ More urban backgrounds
  ■ Limited livestock experience or focus in only one specie
  ■ Expressed concerns to being at a disadvantage in senior exit interviews and end of semester surveys
    ● More experience and proper training
    ● Aid in preparation for upper-level courses
    ● Safety and liability issues
In Response

- AnS 190X: Livestock Handling, Safety and Well-Being
  - Sheep, swine, poultry, horses, beef- and dairy cattle
  - Biosecurity, compromised animals and transportation
  - Offered as either an eight-week course or an intensive one-week course
  - Enrollment limited to 24 students
  - Assessed through online quizzes, final written exam and final lab practicum assessment
Study

 Objective:
  ■ The objective of this study was to determine if the course duration affected student material retention and final laboratory practicum grades.

 Course enrollment:
  ■ Eight-week course: n=22
  ■ One-week course: n=23
## Results

### Mean Average Scores for AnS 190X Courses

<table>
<thead>
<tr>
<th></th>
<th>One-week course (n=21)</th>
<th>Eight-week course (n=22)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz Scores</td>
<td>87.16</td>
<td>82.15</td>
<td>0.02</td>
</tr>
<tr>
<td>Final Exam</td>
<td>86.38</td>
<td>82.73</td>
<td>0.03</td>
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<tr>
<td>Lab Practicum</td>
<td>90.91</td>
<td>78.73</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Final Grade</td>
<td>91.62</td>
<td>89.12</td>
<td>0.01</td>
</tr>
</tbody>
</table>
Discussion

◆ One-week vs. eight week
  ■ Time between class periods
  ■ Demographics of class enrollment
    ● Classification
    ● Major
    ● Background
Conclusion

◆ Students enrolled in the intensive one-week course, had greater overall retention of material
THANK YOU FOR YOUR ATTENTION

QUESTIONS?