Standardized Assessment Measures for the Ferris Learning Outcomes

4) Nationally normed exam

**DESCRIPTION:** Student performances on standardized exams (e.g. ETS Field Exams or ACS exams) are evaluated against the national norms. The percentile ranking of each student is recorded using the NORM data workbook.

**SCORING:** The normed student score is transformed into outcome rubric scores using the following scheme:

- **0) Deficient**
  \[ 0^{th} \leq \text{percentile} < 16^{th} \]  
  (worse than one SD below the mean)
- **1) Beginning**
  \[ 16^{th} \leq \text{percentile} < 30^{th} \]  
  (between one half and one SD below the mean)
- **2) Progressing**
  \[ 30^{th} \leq \text{percentile} < 50^{th} \]  
  (between zero and one half a SD below the mean)
- **3) Proficient**
  \[ 50^{th} \leq \text{percentile} < 85^{th} \]  
  (between zero and 1 SD above the mean)
- **4) Advanced**
  \[ 85^{th} \leq \text{percentile} \leq 100^{th} \]  
  (more than one SD above the mean)

**ANALYSIS:** The number of student scores meeting or exceeding a threshold rubric score of 3.0 is determined for the assignment. The average and 95% confidence interval of the class rubric scores is calculated and classified as indicated in the following scheme:

- **0) Deficient**
  \[ 0.0 \leq \text{class average} < 1.0 \]
- **1) Beginning**
  \[ 1.0 \leq \text{class average} < 1.8 \]
- **2) Progressing**
  \[ 1.8 \leq \text{class average} < 2.6 \]
- **3) Proficient**
  \[ 2.6 \leq \text{class average} < 3.4 \]
- **4) Advanced**
  \[ 3.4 \leq \text{class average} \leq 4.0 \]

A one factor, two-tailed t-test is used to evaluate the statistical significance of differences between class average and the threshold score of 2.6 points. Cohen’s d is use to determine the magnitude of any effect sizes found.

**CRITERION LEVELING:** The expectations of the criteria of success depend upon the level of the course assessed. The target thresholds for each level are defined as follows:

- **100-level**
  50% of individuals should be proficient or better (3 on the rubric) by the end of instruction  
  The class average should fall within the progressing level (threshold \( \geq 1.8 \))
- **200-level**
  60% of the individuals should be proficient or better (3 on the rubric) by the end of instruction  
  The class average should fall within the proficient level (threshold \( \geq 2.6 \))
- **300-level**
  70% of individuals should be proficient or better (3 on the rubric) by the end of instruction  
  The class average should fall within the proficient level (threshold \( \geq 2.6 \))
- **400-level**
  80% of individuals should be proficient or better (3 on the rubric) by the end of instruction  
  The class average should fall within the proficient level (threshold \( \geq 2.6 \))