Learning Goal #1: Rubric for Assessing Student Proficiency in Quantitative Methods

Student Learning Goal: Students need to develop a clear understanding of statistics and must demonstrate the ability to interpret results from empirical research.

Student name or exam number: ________________________________

Date of assessment: ________________________________

Assessment based on the statistics portion of the first-year exam.

Please use the following scale to evaluate the four criteria below:

<table>
<thead>
<tr>
<th>Score</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1-3)</td>
<td>Below the Standard</td>
</tr>
<tr>
<td>(4-7)</td>
<td>Meets the Standard</td>
</tr>
<tr>
<td>(8-10)</td>
<td>Exceeds the Standard</td>
</tr>
</tbody>
</table>

Criterion | Overall Score
--- | ---
1. Student understands underlying theory for inferential statistics  
   • Probability theory ______  
   • Probability distributions ______  
   • Sampling distributions ______  
2. Proficient in inferential statistics  
   • Estimation theory and applications ______  
   • Hypothesis testing: problem formulation ______  
   • Hypothesis testing: test implementation ______  
   • Hypothesis testing: power and sample size ______  
3. Proficient with regression analysis  
   • Underlying theory ______  
   • Model specification and implementation ______  
   • Diagnostic procedures ______  
   • Interpretation of results ______  
4. Proficient with analysis of variance  
   • Underlying theory ______  

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1 The overall score is the average score within each criterion. Not all evaluations will assess every sub-criterion. Those not assessed on a particular evaluation will be noted N/A and will not be figured into the overall score.
• Model specification and implementation ______
• Diagnostic procedures ______
• Interpretation of results ______

Comments:

Name of Evaluator: ______________________________________

Signature: ___________________________________________