

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:

<u>Score</u>	<u>Evaluation</u>
(1-3)	Below the Standard
(4-7)	Meets the Standard
(8-10)	Exceeds the Standard

<u>Criterion</u>	<u>Overall Score¹</u>
1. Student understands underlying theory for inferential statistics <ul style="list-style-type: none"> • Probability theory _____ • Probability distributions _____ • Sampling distributions _____ 	_____
2. Proficient in inferential statistics <ul style="list-style-type: none"> • Estimation theory and applications _____ • Hypothesis testing: problem formulation _____ • Hypothesis testing: test implementation _____ • Hypothesis testing: power and sample size _____ 	_____
3. Proficient with regression analysis <ul style="list-style-type: none"> • Underlying theory _____ • Model specification and implementation _____ • Diagnostic procedures _____ • Interpretation of results _____ 	_____

<u>Criterion</u>	<u>Overall Score</u>
4. Proficient with analysis of variance <ul style="list-style-type: none"> • Underlying theory _____ 	_____

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: _____