



## **College of Business & Economics**

### **Assurance of Learning**

Program Learning Objective (PLO): Data Analysis Using Software  
Spring 2017

**MA ECONOMICS**

**PLO4; LO4A**

**MA Econ Learning Goal 4: Students who graduate will be effective data analysts with the ability to use advanced software.**

*(Learning goal statement was revised during 2015-2016 quarter-to-semester conversion process.)*

**CBE Learning Objective 4A:**

LO4A: Students who graduate will apply specialized software for data analysis that is informed by economic theory.

*(Learning objective statement was revised during 2015-2016 quarter-to-semester conversion process.)*

**Mapped Course:**

ECON 6896: Research Methods

**Curriculum Alignment:**

Research methodologies, data analysis, and report writing. Provides students with analytic and research tools to increase their capacity to pose, answer, and critically evaluate research questions. Culminates in research project that synthesizes research methods, statistical analysis, and reporting of empirical results.

**Participating Faculty:**

1 teaching faculty.

**Methods & Procedures:**

Individual student project. The piece of assessment (artifact) is the empirical research paper at the center of 6896 (i.e. the class is designed to force students to conduct an original piece of empirical research).

**Assessment Measurement Tool Used:**

Internally developed rubric using outside sources.

**Status of Assessment:**

Completed.

**Artifacts Archived:**

TBD

**Performance Targets:**

There are two targets set for this skill, (1) 70% of students will meet or exceed expectations; and (2) less than 10% of students will score “1” (below expectations) on any “trait” in the rubric. Overall, 98% of students met expectations on the learning objective.

n = 13	Trait 1	Trait 2	Trait 3	Trait 4
<b>Meets Expectations</b>	100%	92%	100%	100%
<b>Does Not Meet Expectations</b>	0%	8%	0%	0%
<b>Total</b>	100%	100%	100%	100%
<b>Overall Score</b>	<b>98%</b>			

## Data Summary & Analysis

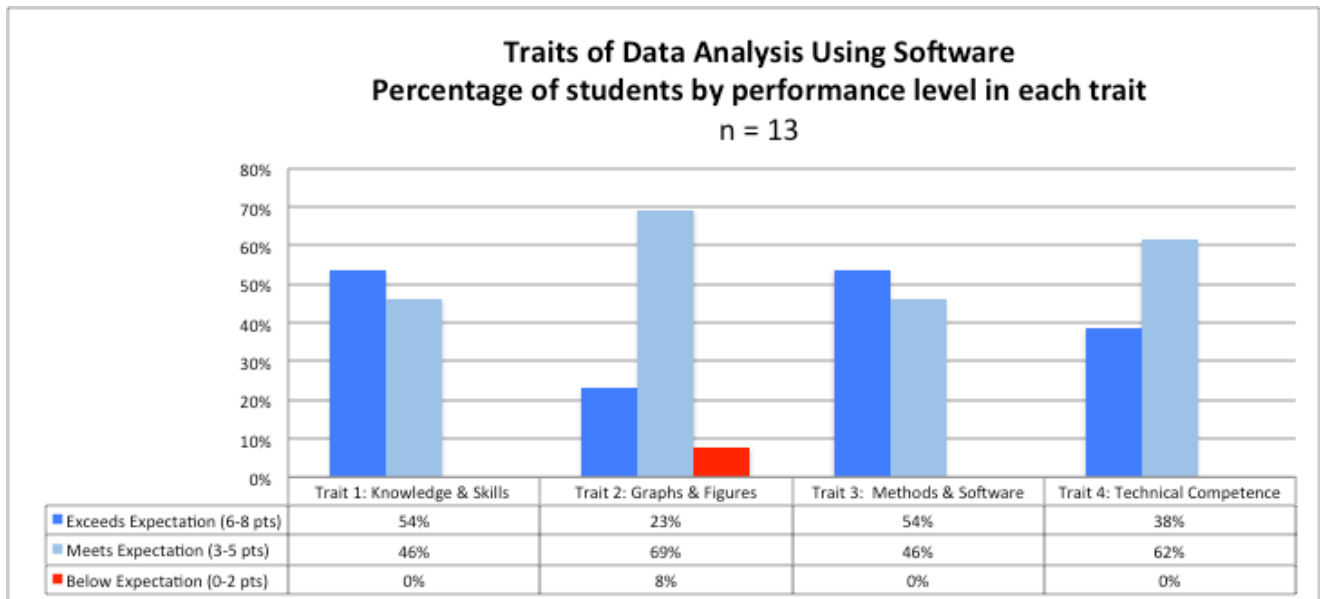
Overall Assessment Scores by Individual Trait:

Assessed Traits n = 13	Meets Expectation*	Below Expectation
Trait 1: Knowledge & Skills	100%	0%
Trait 2: Graphs & Figures	92%	8%
Trait 3: Methods & Software	100%	0%
Trait 4: Technical Competence	100%	0%

\* Meets expectations = Meets expectations + Exceeds expectations

Detailed Assessment Scores by Individual Trait\*:

n = 13	Trait 1: Knowledge & Skills	Trait 2: Graphs & Figures	Trait 3: Methods & Software	Trait 4: Technical Competence
Exceeds Expectation (6-8 pts)	54%	23%	54%	38%
Meets Expectation (3-5 pts)	46%	69%	46%	62%
Below Expectation (0-2 pts)	0%	8%	0%	0%



\*Percentages may not add to 100% due to rounding.

**Data Analysis Using Software Rubric**

<b>LO4A: Data Analysis Using Software</b>			
<b>Goal 4:</b>	Students who graduate will be effective data analysts with the ability to use advanced software.		
<b>Objective 4A:</b>	Students who graduate will apply specialized software for data analysis that is informed by economic theory.		
<b>Traits</b>	<b>(6-8 pts) Exceeds Expectations</b>	<b>(3-5 pts) Meets Expectations</b>	<b>(0-2 pts) Below Expectations</b>
<b><i>Knowledge &amp; Skills in Data Analysis</i></b>	Able to make sound judgements and draw insightful conclusions based on the analysis of data	Able to make judgements and draw some conclusions based on the analysis of data but with some mistakes.	Fails to make judgements and draw conclusions based on the analysis of data
<b><i>Graphs &amp; Figures</i></b>	Graphs, figures and tables presented provide key insights into the investigation; they represent a sophisticated visual description of the data and the results of the empirical analysis.	Graphs and figures presented adequately accompany the investigation of the hypothesis being examined; they present an adequate visual description of the data and the results of the empirical analysis.	Graphs and figures presented do not further the investigation; they are an inaccurate visual description of the data and the results.
<b><i>Use of Methods &amp; Software</i></b>	Sophisticated use of statistical methods and statistical software in the empirical analysis.	Adequate use of statistical methods and statistical software in the empirical analysis.	Insufficient and inaccurate use of statistical methods and statistical software in the empirical analysis.
<b><i>Technical Competence</i></b>	Student's technical and professional competence are superior to peers	Student acquires sound technical competence in relation to course information and is able to apply it.	Student demonstrates little to no technical competence.

### Raw Assessment Scores

Instructor	Individual	Trait 1: Knowledge & Skills	Trait 2: Graphs & Figures	Trait 3: Methods & Software	Trait 4: Technical Competence
Instructor 001	Individual 001	3	3	3	3
Instructor 001	Individual 002	6	3	6	5
Instructor 001	Individual 003	6	5	6	5
Instructor 001	Individual 004	7	6	6	6
Instructor 001	Individual 005	5	5	5	4
Instructor 001	Individual 006	5	4	5	5
Instructor 001	Individual 007	5	3	3	3
Instructor 001	Individual 008	7	5	6	6
Instructor 001	Individual 009	5	3	6	5
Instructor 001	Individual 010	6	6	6	6
Instructor 001	Individual 011	7	8	7	7
Instructor 001	Individual 012	6	2	3	3
Instructor 001	Individual 013	5	5	4	6

End of Report