

Appendix A. Student Survey

BUS 230: Business and Economics Research and Communication
Beginning of Semester Student Survey

Name: _____

Section: _____

1. Major: _____

2. Academic Class Standing, (Number of Semesters Completed): _____

3. Cumulative GPA _____

4. How would you describe your knowledge of SPSS? (circle answer)

Never used

Limited Knowledge

Competent

Proficient

5. How would you describe your knowledge of PowerPoint? (circle answer)

Never used

Limited Knowledge

Competent

Proficient

6. How would you rate your abilities in the following skill areas? (circle answer)

Statistics	Excellent	Very Good	Average	Fair	Poor
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Computer	Excellent	Very Good	Average	Fair	Poor
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Writing	Excellent	Very Good	Average	Fair	Poor
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Teamwork	Excellent	Very Good	Average	Fair	Poor
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7. When did you last take the statistics prerequisite for this class (MTH 145)

Semester _____ Year _____

8. What grade did you receive in MTH 145? A AB B BC C D F

9. What is a null hypothesis?

10. What is a random probability sample?

11. Suppose that you have conducted a survey of incoming freshmen. In the survey, you asked students to report: gender (reported as male or female); income earned in the summer of 2010; income earned in the summer of 2011; summer work classification (reported as volunteer work only, part-time paid, full-time paid); and college (reported as CBA, CLS, SAH, or School of Education). With this data, identify the statistical test you would use to address the following questions.

a) You know that the average summer income earned by an incoming college freshman student in the U.S. is \$2,300. Did UWL freshmen earn more, less or the same as the national average?

b) Did male or female freshmen students earn more last summer?

c) Did students earn more, less or the same in 2011 as they did in 2010?

d) Is there a relationship between summer work classification and the college a student is enrolled in?

Appendix B. In-class Exercise: Choosing Statistical Tools to Answer Research Questions

Directions: You will be given four research questions involving the survey questions below. Work in your groups to answer the questions when prompted. All papers will be collected.

Scenario: A researcher is interested in exploring the relationship between student employment and effort put forth towards academics. She administers a survey to full-time University of Wisconsin-La Crosse (UW-L) students which includes the following questions:

- What is your employment status?
 - Full time.
 - Part time.
 - Not employed.
- On average, how many hours do you work per week? (Open ended)
- On average, how many hours do you study per week? (Open ended)
- What is your class standing?
 - Freshman
 - Sophomore
 - Junior
 - Senior
 - Graduate Student
 - Other

- Suppose the national average for the number of hours full-time college students work is 12 hours per week. The researcher is interested in determining if there is evidence that UW-L students study on average more hours than the national average.

a. What statistical method/test would you use to answer this question.

b. Explain your reasoning for your answer in part (a). What characteristics of this research question and methodology make the test you chose appropriate.

c. How confident are you that your answer to (a) and (b) is correct?
Your level of confidence can be different than other members of your group.

Very Confident **Somewhat Confident** **Not Confident** (Circle One)

- Name _____

- The researcher is interested in determining whether there is a difference in the average number of hours students study per week between those who are employed (either full-time or part-time) and those who are not employed.

a. What statistical method/test would you use to answer this question.

b. Explain your reasoning for your answer in part (a). What characteristics of this research question and methodology make the test you chose appropriate.

d. How confident are you that your answer to (a) and (b) is correct?
Your level of confidence can be different than other members of your group.

Very Confident

Somewhat Confident

Not Confident

(Circle One)

- Name _____

- The researcher is interested in determining whether there is a relationship between class standing and employment status.

a. What statistical method/test would you use to answer this question.

b. Explain your reasoning for your answer in part (a). What characteristics of this research question and methodology make the test you chose appropriate.

c. How confident are you that your answer to (a) and (b) is correct?
Your level of confidence can be different than other members of your group.

Very Confident

Somewhat Confident

Not Confident

(Circle One)

- Name _____

- The researcher is interested in determining whether on average students spend more hours studying than the number of hours students spend working.

a. What statistical method/test would you use to answer this question.

b. Explain your reasoning for your answer in part (a). What characteristics of this research question and methodology make the test you chose appropriate.

c. How confident are you that your answer to (a) and (b) is correct?
Your level of confidence can be different than other members of your group.

Very Confident

Somewhat Confident

Not Confident

(Circle One)

Name _____

Appendix C. BUS 230 Lesson Study Observation Guide

Observe the group discussion about the statistical test which is appropriate to answer the question. Record each observation with a number to indicate the order that the students consider each element. They may circle around to an element more than once, record this as it happens (i.e. any element may have more than one number beside it).
If the conclusion about the element is incorrect, record an X by the number.

Group number _____

Observation number (circle) 1 2 3 4

Element	Consideration
Reflect on the purpose or intent of statistical test (for example they talk about determining the difference or relationship).	
Discuss the number of variables considered	
Discuss the scale of measurement	
Discuss whether variables are independent or not	
Other	

Did students take into account any irrelevant considerations?

Did students reach the correct conclusion without well articulated reasons?

Did students reach the incorrect conclusion, but use mostly correct and well articulated reasons?

How many group members were actively engaged? (Include those who actively listening to understand the concepts, but not those just trying to write the correct answer)