Institution 1 and Institution 2

**Virtual Exchange Statistics Project**

Professor 1 and Professor 2

Due Date: XXX

**Learning Objectives:**

* Students will learn about statistics from another perspective.
* Students will learn digital literacy skills and be better prepared to work in virtual teams.
* Students will enhance their communicative skills with non-native speakers.
* Students will gain intercultural awareness and understanding.
* Students will select samples in various ways.
* Students will write a regression line equation which best represents data relating two variables and interpret their results.
* Students will compute the linear correlation coefficient and coefficient of determination for a regression line and interpret its significance.
* Students will compute binomial probabilities and their mean and standard deviation;
* Students will make appropriate checks for normality of distributions and apply the properties of normal and standard normal distributions to determine probabilities;
* Students will describe and calculate probabilities of sampling distributions.

**Project Description**:

Students on both campuses will be divided into cross-university groups with 5 or 6 students in each group. Groups will be randomly assigned to three project topics. With each topic, students must exchange information about what concepts they have been taught. They should compare and contrast the differences in the material and presentation. Students will create a 5 – 10 minute video on their topics. They will also create a one-page (8x 11 - front only) review document for all students on both campuses can use.

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|  | Sampling Techniques | Regression | Probability Distributions |
| Campus 1 | Simple random sampling  Cluster  Stratified  Convenience  Systematic | Simple Linear (calculation and interpretation of the slope, y-intercept, correlation coefficient, and coefficient of determination) | Discrete  Binomial  Normal  Sampling |
| Campus 2 |  |  |  |

**Rubric:**

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|  | Description | Points Available | Points Earned |
| Introductions | Students will create a 2-minute introduction of themselves. | 10 |  |
| Handout | Students will create a detailed 1-page (8x11-front only) summary handout of the topics. The document must also indicate which information only refers to 1 particular institution. | 35 |  |
| Video – Time frame | Students created a video that lasts 5 – 10 minutes on their project topic. | 5 |  |
| Video - Inclusive | Everyone on each team has at least a 1-minute speaking role on the video. | 5 |  |
| Video - Content | Students explained their subject matter completely and compared and contrasted the differences in material learned at each institution. | 35 |  |
| Reflection | Students will write a 1-page reflection on their Virtual Exchange experience. | 10 |  |
| Total Points | | 100 |  |