

KSS 5001: Statistical Analysis in Kinesiology & Sport Studies
Eastern Illinois University, Kinesiology & Sport Studies
Spring 2013
Lantz 3871
Tuesday, 4:00-5:40 p.m.

Instructor: Dr. Ovande Furtado, Jr.

Office: Lantz 2220 Office Hours: T W R 10-noon (or by appointment)

Email: ofurtado@eiu.edu Phone: (217) 581-3939

Required Text: Statistics in Kinesiology by Vincent & Weir

Course Description:

This course is designed to provide students with basic statistical tools useful in the planning, design and evaluation of studies in Kinesiology & Sport Studies. This course introduces the student to descriptive and inferential statistics commonly used in research. Further, the student will utilize software applications as they relate to research, tests, measurements, and evaluation.

Course Objectives:

Identify appropriate statistical methods for testing various research hypotheses.
Recognize appropriate uses of basic descriptive and inferential statistical procedures.
Utilize basic descriptive and inferential statistical procedures using statistical software.
Interpret statistical output and present the results of statistical analyses.
Interpret and evaluate results section of selected research articles.

Evaluation Criteria:

Mid-Term Exam	50 pts
Final Exam	100 pts
Online Quizzes (13)	140 pts
Class Participation	10 pts

Total Points: 300 pts

Grading Scale:

A = 300 – 270, B = 269 – 240, C = 239 – 210, D = 209 – 180, F = Less than 180

Class Assignments

Exams:

There will be two exams in this class. Your midterm will be worth 50 out of 300 points of your total grade, and your final exam will be worth 100 out of 300 points. Each exam will consist of two parts.

Part I: Take home project (30-60 points)

Part II: In-class multiple choice (20-40 points)

The take-home project portion of your exam will be delivered online via D2L, and students will be required to turn the take home exam in prior to completing the in-class portion of the test. The take-home project is a formal assessment, and as such, it should be an assessment of individual capabilities alone. The penalty for academic dishonesty is a 0 on the assignment, failure in the class, and possible dismissal from the program/university. The in-class portion of the exam will consist of multiple choice questions, and each exam will cover all class notes, readings, and may incorporate information from the online quizzes.

Quizzes:

There will be 13 online quizzes administered via D2L throughout the semester. Students are to complete the online quiz prior to the start of class each week. The quizzes will assess student understanding of the topic covered during the previous class period. Students are allowed to utilize class notes and the course text to answer quiz questions; however, collaboration with other students is not allowed. The penalty for academic dishonesty is a 0 on the assignment, failure in the class, and possible dismissal from the program/university. Each class period will begin with a discussion of the quiz including a question and answer session. Each quiz will be worth 10 out of 300 points for the class.

Class Participation:

Attendance and participation is worth 10 out of 300 points for the class. Graduate learning requires regular, active discussion of each topic presented. Students should complete all assigned reading in advance of class to prepare to intelligently discuss each topic. Students are expected to attend and participate during each class period, and individual academic success largely depends on attendance and participation even though there are only 10 points to quantify this area.

Course Policies

Academic Integrity:

From the EIU Student Conduct Code

Eastern students observe the highest principles of academic integrity and support a campus environment conducive to scholarship. Violations of this standard:

Conduct in subversion of academic standards, such as cheating on examinations, plagiarism, collusion, misrepresentation or falsification of data.

Theft or the unauthorized possession of examinations; alteration, theft, or destruction of the academic work of others, or academic records, library materials, laboratory materials, or other University equipment or property related to instructional matters or research.

Submitting work previously presented in another course unless specifically permitted by the instructor.

Conduct which disrupts the academic environment; disruption in classes, faculty offices, academic buildings, or computer facilities.

Complicity with others in violations of this standard.

Late Submissions:

It is the student's responsibility to communicate any absences that would result in missing an exam or handing in of an assignment. Any make-up exams or late assignments must be accompanied by written documentation of the reason for the absence. These instances will be handled on a case-by-case basis. Late submissions of quizzes will not be accepted.

Additional Information & Assistance:

For help with study skills, writing, grammar, and other educational assistance, the Student Success Center and The Writing Center of Eastern Illinois University provides training that will help you succeed. Below is their contact information:

Student Success Center

1302 9th Street Hall

(217) 581-6696

www.eiu.edu/~success

The Writing Center of EIU

3110 Coleman Hall

(217) 581-5929

www.eiu.edu/~writing

Also, please feel free to contact the instructor with any questions, comments, or concerns you may have with respect to class.

Class Schedule:

Course Schedule is Tentative and Subject to Change at the Discretion of the Instructor

Date	Topic	Reading	Assignment
January 8	Measurement, Statistics, and Research	<i>Ch. 1</i>	
January 15	Organizing and Displaying Data	<i>Ch. 2</i>	Quiz #1
January 22	Percentiles	<i>Ch. 3</i>	Quiz #2
January 29	Measures of Central Tendency	<i>Ch. 4</i>	
February 5	Measures of Variability	<i>Ch. 5</i>	Quizzes #3 & 4
February 12	The Normal Curve	<i>Ch. 6</i>	Quiz #5
February 19	Fundamentals of Statistical Inference Mid Term Practice Problems	<i>Ch. 7</i>	Quiz #6
February 26	Mid Term Exam (Covers Chapters 1 – 7)		Mid Term
February 26	Correlation and Bivariate Regression	<i>Ch. 8</i>	Quiz #7
March 5	Multiple Correlation and Multiple Regression	<i>Ch. 9</i>	Quiz #8
March. 11	Spring Break	No class	
March 19	The t-test	<i>Ch. 10</i>	Quiz #9
March 26	Simple ANOVA	<i>Ch. 11</i>	Quiz #10
April 2	ANOVA with Repeated Measures	<i>Ch. 12</i>	Quiz #11
April 9	Factorial Analysis of Variance	<i>Ch. 14</i>	Quiz #12
April 16	Analysis of Covariance	<i>Ch. 15</i>	Quiz #13
April 23	Final Review	<i>All previous</i>	

		<i>chapters</i>	
--	--	-----------------	--

***** Final Exam will be administered online on the University scheduled date. *****