

Course Policy Fall 2015

INQ 240F- Statistics and the Sports Industry

Instructor: Joseph Slagel

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Office Hours: After class, 4:20-5:00 Tuesday/Thursday, **and by appointment.**

Class Information

Meeting Time: 2:50-4:20 Tuesdays and Thursdays

Meeting Location: Trexler 374

Course Objective: The objective of this course is to explore probability and statistics through the sports industry. The focus of this course will be asking questions and then developing the statistical techniques necessary to answer those questions. Armed with probability theory and statistical techniques we will determine how to summarize, analyze, and communicate key features of a data set. We will understand the leading role that statistical analysis plays in the sports industry through quality assessment, team management, and safety issues.

Learning Outcomes:

1. Students will be able to use the methodologies of statistics to
 - a. Investigate a topic of interest and make decisions based on the results.
 - b. Design and carry out a simple statistical experiment.
 - c. Critique news stories and journal articles that include statistical information. In the critique students will recognize variability and its consequences, identify potential sources of bias and both proper and improper cause and effect inference.
2. Students will be able to articulate the importance and limitations of using data and statistical methods in decision making.
3. Students will be able to write about course topics clearly and effectively.
4. Students will be able to interpret quantitative information related to the course topic.

Course Topics:

- Descriptive Statistics
- Graphical Methods
- Correlation and Regression
- Estimation
- Elementary Probability
- Test of Hypothesis (z-tests, t-tests and Chi-square test)
- Confidence Intervals
- Analysis of Variance

Textbook and Materials: *A First Course in Statistics* by McClave and Sinich (Pearson), 11th edition; ISBN #9780321891921

A Writer's Reference, Diana Hacker RC Custom Edition

Minitab stats package (available on Roanoke College Remote Computing)

You may use any calculator in this course. A scientific calculator may make some of the calculations easier.

Course Policies

Attendance Policy: Attendance is required and expected and is crucial to be successful in this course. An absence that is not discussed with the instructor prior to class is considered unexcused. Regardless of whether the absence is excused or not, you are responsible for all the material covered in class.

Determination of Final Grades:

Homework/Quizzes 15%

Homework for each test will be posted on Inquire. The test reviews are not to be turned in. Keep all of your homework organized; it is due to be turned in on test day. All test 1 homework is due on the due date of test 1, all test 2 homework is due on the due date of test 2, and so on. Completing your homework every day is a necessity if you want to succeed in this course. Please stop by my office or send me an email with any questions. You may submit the homework via email or turn in a physical copy with your test. There will be the occasional in-class quiz on readings I assign. You will always have prior warning regarding a quiz.

Written Assignments 15%

You will be assigned a medley of written assignments throughout the semester, many of them will be smaller in size. A larger written assignment will be due on the last day of class. Information regarding the project will be announced in class and on posted on Inquire. You may submit this project via email to the instructor, or you can turn in a physical copy.

Exams 45%

You will have 3 exams throughout the semester each worth 100 points. Dates of the exams will be announced in class at least one week prior to the exam. There will be no make-up exams. If you have to miss an exam, your final exam grade will count as the missed exam grade.

Final Exam 25%

Your exam will be **Thursday, December 17, 2015 from 2:00-5:00 p.m.** It will be a closed book, closed notes, comprehensive final exam.

MCSP Conversation Series: Attending at least one MCSP conversation series event is required. Within one week of the lecture, a one page reflection paper will be due and will count as a Written Assignment grade. While attending only one event is required, students are encouraged to attend additional lectures.

Academic Integrity: You are expected to adhere to the Academic Integrity policies of Roanoke College. If you submit work it must be your own. You must not use any cell phones during class or testing times. Looking at a cell phone during a testing time is considered to be a violation of Academic Integrity. Any violation of Academic Integrity will be reported.

The Office of Disability Support Services, located in the Goode-Pasfield Center for Learning and Teaching in Fintel Library, provides reasonable accommodations to students with identified disabilities. Reasonable accommodations are provided based on the diagnosed disability and the recommendations of the professional evaluator. In order to be considered for disability services, students must identify themselves to the Office of Disability Support Services. Students are required to provide specific current documentation of their disabilities. Please contact Richard Robers, M.A. Ed., Coordinator of Disability Support Services, at 540-375-2247 or e-mail robers@roanoke.edu.

Subject Tutoring is a CRLA Nationally Certified Program located on the lower-level of Fintel library in room 005. Subject Tutoring offers individual appointments in 30-minute intervals for Lab Sciences, Modern Languages, Math & CPSC, Social Sciences, Business & Economics. Hours are Sunday - Thursday 4 p.m. - 9 p.m. For a list of tutorials or to make an appointment, go to www.roanoke.edu/tutoring.

The Writing Center @ Roanoke College, located in Room 15 on the Lower Level of Fintel Library, offers writing tutorials for students working on writing assignments/projects in any field. Writers at all levels of competence may visit the Writing Center at any point in their process, from brainstorming to drafting to editing, and talk with trained peer writing tutors in informal, one-on-one sessions. The Writing Center is open Sunday through Thursday from 4 to 9 pm. We open for Spring Semester on Monday, January 23rd. Simply stop in, or schedule an appointment by going to www.roanoke.edu/writingcenter, where our schedule of writing workshops and creative writing playshops is also posted. Questions? Email writingcenter@roanoke.edu or call 375-4949. You can also Like our page on Facebook!

Final Grades A grade scale will be determined after final grades are computed, but will be no worse than the scale given below

A 93-100, A- 90-92,

B+ 87-89, B 83-86, B- 80-82,

C+ 77-79, C 73-76, C- 70-72,

D+ 67-69, D 63-66, D- 60-63,

F 0-59